

Министерство образования и науки Российской Федерации
Федеральное государственное бюджетное образовательное учреждение
высшего профессионального образования
"Липецкий государственный технический
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Типовой расчет
Неопределенные и определенные интегралы

Сетевое обновляемое электронное учебное пособие

Липецк
2016

УДК 517.3(07)

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Дополнение к типовому расчету по определенным интегралам
[Электронный ресурс]:сетевое обновляемое электрон. учеб. пособие/
Ю.Д.Ермолаев.-Электрон.дан.(0.6 Мб).-Липецк:Издательство ЛГТУ, 2016.-
127 с.

Режим доступа:<http://www.stu.lipetsk.ru/education/chair/kaf-vm/mu/>
Систем. требования: Intel Pentium (или аналогичный процессор других производителей), 512 Мб оперативной памяти, Adobe Reader (или аналогичный продукт для чтения файлов формата pdf).

Типовой расчет предназначен для студентов направлений 01.03.03, 02.03.03, 09.03.01, 09.03.04, 27.03.03 и других, изучающих раздел интегрирования в курсе математики. Представлены 120 вариантов типового расчета по 40 заданий в каждом варианте.

Ключевые слова: неопределенный интеграл; определенный интеграл; интегрирование; первообразная; подстановка; интегрирование по частям

Таблица интегралов

1. $\int x^n dx = \frac{x^{n+1}}{n+1} + C$

2. $\int \frac{dx}{x} = \ln|x| + C$

3. $\int \sin ax dx = -\frac{1}{a} \cos ax + C$

4. $\int \cos ax dx = \frac{1}{a} \sin ax + C$

5. $\int \frac{dx}{\cos^2 x} = \operatorname{tg} x + C$

6. $\int \frac{dx}{\sin^2 x} = -\operatorname{ctg} x + C$

7. $\int \operatorname{tg} x dx = -\ln|\cos x| + C$

8. $\int \operatorname{ctg} x dx = \ln|\sin x| + C$

9. $\int e^x dx = e^x + C$

10. $\int a^x dx = \frac{a^x}{\ln a} + C$

11. $\int \frac{dx}{1+x^2} = \operatorname{arctg} x + C$

12. $\int \frac{dx}{a^2+x^2} = \frac{1}{a} \operatorname{arctg} \frac{x}{a} + C$

13. $\int \frac{dx}{a^2-x^2} = \frac{1}{2a} \ln \left| \frac{a+x}{a-x} \right| + C$

14. $\int \frac{dx}{\sqrt{1-x^2}} = \operatorname{arcsin} x + C$

15. $\int \frac{dx}{\sqrt{a^2-x^2}} = \operatorname{arcsin} \frac{x}{a} + C$

16. $\int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln|x + \sqrt{x^2 \pm a^2}| + C$

17. $\int \operatorname{sh} ax dx = \frac{1}{a} \operatorname{ch} ax + C$

18. $\int \operatorname{ch} ax dx = \frac{1}{a} \operatorname{sh} ax + C$

19. $\int \frac{dx}{\operatorname{ch}^2 x} = \operatorname{th} x + C$

20. $\int \frac{dx}{\operatorname{sh}^2 x} = -\operatorname{cth} x + C$

Свойства неопределенного интеграла

$$1. \int [f_1(x) + f_2(x)] dx = \int f_1(x) dx + \int f_2(x) dx.$$

$$2. \int C f(x) dx = C \int f(x) dx.$$

$$3. \text{Если } \int f(x) dx = F(x) + C, \text{ то } \int f(ax + b) dx = \frac{1}{a} F(ax + b) + C.$$

Вычисление интегралов, содержащих квадратный трехчлен

$$1. \int f(ax^2 + bx + c) dx.$$

$$ax^2 + bx + c = a\left(x + \frac{b}{2a}\right)^2 \pm \left(\frac{c}{a} - \frac{b^2}{4a^2}\right) = (m^2 t^2 \pm n^2).$$

$$x + \frac{b}{2a} = t, dx = dt.$$

Если под знаком интеграла $f(x, \sqrt{ax^2 + bx + c}) = f_1(\sqrt{m^2 t^2 \pm n^2})$, то:

$$1. \sqrt{m^2 t^2 + n^2} \Rightarrow t = \frac{n}{m} \operatorname{tg} z, \quad (t = \frac{n}{m} \operatorname{ctg} z).$$

$$2. \sqrt{m^2 t^2 + n^2} \Rightarrow t = \frac{n}{m} \sec z, \quad (t = \frac{n}{m} \operatorname{cosec} z).$$

$$3. \sqrt{n^2 - m^2 t^2} \Rightarrow t = \frac{n}{m} \sin z, \quad (t = \frac{n}{m} \cos z).$$

Интегрирование тригонометрических функций

$$1. \int R(\sin x, \cos x) dx.$$

$$t = \operatorname{tg} \frac{x}{2}, \quad x = 2 \operatorname{arctg} t, \quad dx = \frac{2dt}{1+t^2}, \quad \sin x = \frac{2t}{1+t^2}, \quad \cos x = \frac{1-t^2}{1+t^2}.$$

$$2. \int R(\sin^2 x, \cos^2 x) dx.$$

$$t = \operatorname{tg} x \quad (t = \operatorname{ctg} x), \quad x = \operatorname{arctg} t, \quad (x = \operatorname{arcctg} t), \quad dx = \frac{dt}{1+t^2},$$

$$\sin^2 x = \frac{t^2}{1+t^2}, \quad \cos^2 x = \frac{1}{1+t^2}.$$

$$3. \int R(\sin x) \cos x dx \Rightarrow t = \sin x, \quad dt = \cos x dx.$$

$$4. \int R(\cos x) \sin x dx \Rightarrow t = \cos x, dt = -\sin x dx.$$

$$5. \int \sin^m x \cos^{2n+1} x dx = \int \sin^m x (1 - \sin^2 x)^n \cos x dx \\ = \int t^m (1 - t^2)^n dt.$$

$$6. \int \cos^m x \sin^{2n+1} x dx = \int \cos^m x (1 - \cos^2 x)^n \sin x dx \\ = - \int t^m (1 - t^2)^n dt.$$

$$7. \int \sin^{2m} x \cos^{2n} x dx = \int (\sin^2 x)^m (\cos^2 x)^n dx \\ = \int \left(\frac{1}{2} - \frac{1}{2} \cos 2x\right)^m \left(\frac{1}{2} + \frac{1}{2} \cos 2x\right)^n dx.$$

Подстановки Эйлера

$$1. a > 0, \sqrt{ax^2 + bx + c} = \pm\sqrt{ax} + t.$$

$$2. c > 0, \sqrt{ax^2 + bx + c} = xt \pm \sqrt{c}.$$

$$3. ax^2 + bx + c = a(x - \alpha)(x - \beta), \sqrt{ax^2 + bx + c} = (x - \alpha)t.$$

Интегрирование простейших рациональных дробей

$$1. \int \frac{A}{x - a} dx = A \ln|x - a| + C.$$

$$2. \int \frac{A}{(x - a)^k} dx = \frac{A}{(1 - k)(x - a)^{k-1}}$$

$$3. \int \frac{Ax + B}{x^2 + px + q} dx = \frac{A}{2} \ln|x^2 + px + q| + \frac{2B - Ap}{\sqrt{4q - p^2}} \operatorname{arctg} \frac{2x + p}{\sqrt{4q - p^2}} + C.$$

$$4. \int \frac{dt}{(t^2 + m^2)^k} = \frac{t}{2m^2(k - 1)(t^2 + m^2)^{k-1}} + \frac{2k - 3}{2m^2(k - 1)} \int \frac{dt}{(t^2 + m^2)^{k-1}}$$

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Вариант 1

1. $\int_1^3 \frac{x^4 dx}{5 + 9x}$
2. $\int_3^5 \frac{17x dx}{(5 + x)(6 + x)}$
3. $\int_3^7 \frac{x dx}{4x^2 + 3x + 5}$
4. $\int_2^4 \frac{15 dx}{x\sqrt{4 + 3x}}$
5. $\int_5^9 \frac{x^3 dx}{\sqrt{x^2 - 4}}$
6. $\int_2^3 \frac{25 dx}{16 + 36 \cos^2 x}$
7. $\int_3^4 \frac{6 \sin(\frac{6x + 7}{9}) dx}{\sin(\frac{6x + 7}{9}) + \cos(\frac{6x + 7}{9})}$
8. $\int_0^1 5 \operatorname{ctg}^3(\frac{4x + 3}{9}) dx$
9. $\int_0^1 20e^{-2x} \sin^2 x dx$
10. $\int_1^4 x^3 \ln(9 + x^2) dx$
11. $\int_1^1 x^n (6x - 3)^2 dx$
12. $\int \frac{(3x + 2) dx}{(2x + 5)}$
13. $\int \frac{8x dx}{(7x - 6)^2}$
14. $\int \frac{6 dx}{2x^2 - 2x - 4}$
15. $\int \frac{(3x + 6) dx}{7x^2 - 56x + 287}$
16. $\int \frac{8x dx}{(9 + 4x^2)^2}$
17. $\int \frac{(2x^2 + 7) dx}{5 - 6x^2}$
18. $\int \sqrt{x}(2 - 3x) dx$
19. $\int \sqrt{2 + 5x} dx$
20. $\int \frac{7 dx}{x\sqrt{-21856x^2 - 6720x + 4}}$
21. $\int \frac{9x dx}{\sqrt{5x^2 - 8}}$
22. $\int 5x^2 \sin(3x + 5) dx$
23. $\int 6 \sin^3(2x - 3) dx$
24. $\int \frac{5 \sin x dx}{1 - \sin(2x + 3)}$
25. $\int 5 \sin(6x + 7) \sqrt{1 + 8 \sin^2(6x + 7)} dx$
26. $\int \frac{2 dx}{\sin(7x + 3) \cos^2(7x + 3)}$
27. $\int \frac{3 \cos^3(8x + 7) dx}{\sin(8x + 7)}$
28. $\int \cos(8x - 6) \cos(5x - 3) dx$
29. $\int \operatorname{ctg}^2(8x - 1) dx$
30. $\int x \operatorname{arccotg}(5x + 2) dx$
31. $\int (5x^2 - 1x + 9)5^{x-2} dx$
32. $\int x^2 \operatorname{sh}(5x - 5) dx$
33. $\int 9x^3 \ln(8x - 5) dx$
34. $\int \frac{(4x^2 + 7x + 3) dx}{2x^2 - 24x + 72}$
35. $\int \frac{6 dx}{27 + x^3}$
36. $\int \frac{(4x + 2) dx}{(x^2 - 11x + 30)(x^2 + 2x - 35)}$
37. $\int \sqrt{2x^2 - 28x + 116} dx$
38. $\int \frac{9x^2 - 55x + 64}{x^3 - 8x^2 + 16x} dx$
39. $\int \frac{2x^{7/2} - 3x^{5/3} + 5}{\sqrt{x}}$
40. $\int \frac{6x dx}{(2x - 5)^8}$

Вариант 2

1. $\int_3^5 \frac{x dx}{(7+2x)^2}$.
2. $\int_3^7 \frac{17x dx}{(5+x)(6+x)}$.
3. $\int_3^7 \frac{14x^2 dx}{4-x^2}$.
4. $\int_3^9 \frac{8 dx}{x\sqrt{3+7x}}$.
5. $\int_2^4 \frac{18 dx}{(36-x^2)^{3/2}}$.
6. $\int_9^{10} \frac{35 dx}{25-4\cos^2 x}$.
7. $\int_6^7 \frac{4\sin(\frac{4x+4}{9}) dx}{\sin(\frac{4x+4}{9}) - \cos(\frac{4x+4}{9})}$.
8. $\int_4^5 9 \operatorname{tg}^4(\frac{4x+6}{6}) dx$.
9. $\int_1^6 \frac{10 dx}{5+8e^{-4x}}$.
10. $\int_2^6 5 \sin(\ln(5x+6)) dx$.
11. $\int x^n(6x-3)^2 dx$
12. $\int \frac{6 dx}{(8x-6)^3}$
13. $\int \frac{6 dx}{x(8x-2)}$
14. $\int \frac{4 dx}{2x^2-18x+40}$
15. $\int \frac{(6x+4) dx}{5x^2+30x+45}$
16. $\int \frac{(x^2+2) dx}{7+8x^2}$
17. $\int \frac{(9x-4) dx}{5-4x^2}$
18. $\int (8+2x)(8+5\sqrt{x^3}) dx$
19. $\int \frac{2 dx}{\sqrt{(8+4x)^3}}$
20. $\int \frac{7 dx}{\sqrt{4x^2-40x+96}}$
21. $\int \frac{2x dx}{\sqrt{6+3x^2}}$
22. $\int (2x-5) \sin(4x+1) dx$
23. $\int 6 \sin^5(7x+2) dx$
24. $\int \frac{8 \cos x dx}{1-\cos(5x-2)}$
25. $\int 4 \sin(6x+5) \sqrt{1+3\cos^2(6x+5)} dx$
26. $\int \frac{\sin^3(8x+5) \cos^3(8x+5)}{7 dx}$
27. $\int \frac{6 \cos(7x+7) dx}{\sin^2(7x+7)}$
28. $\int \sin(6x+7) \cos(8x+6) dx$
29. $\int \operatorname{ctg}^4(2x+6) dx$
30. $\int x \operatorname{arcc} \operatorname{tg}(2x-2) dx$
31. $\int (5x^2+6x-4)e^{x-6} dx$
32. $\int \frac{x dx}{\operatorname{ch}^2(5x+4)}$
33. $\int \frac{\ln(7x-4) dx}{35x-20}$
34. $\int \frac{(4x^2+2x-6) dx}{7x^2-56x+455}$
35. $\int \frac{(7x-3) dx}{1x^2-x^4}$
36. $\int \frac{(3x+5) dx}{(x^2+5x-14)(x^2+8x+7)}$
37. $\int \sqrt{3x^2-3x-126} dx$
38. $\int \frac{-1x^2+25x-75}{x^3+125} dx$
39. $\int \frac{(7+3x) dx}{5+\sqrt{x}}$
40. $\int \frac{5x^2 dx}{(8x+2)^5}$

Вариант 3

1. $\int_1^5 \frac{x dx}{(4 + 4x)^3}$.
2. $\int_1^3 \frac{18 dx}{x(6 + 5x)}$.
3. $\int_1^5 \frac{9 dx}{x(36 + x^2)}$.
4. $\int_3^6 \frac{11 dx}{(16 - 25x)\sqrt{x^3}}$.
5. $\int_5^9 \frac{x^2 dx}{\sqrt{x^2 - 4}}$.
6. $\int_5^6 \frac{19 dx}{16 + 25 \cos^2 x}$.
7. $\int_1^2 \frac{7 dx}{\sin^3\left(\frac{3x + 7}{6}\right) \cdot \cos\left(\frac{3x + 7}{6}\right)}$.
8. $\int_4^6 \frac{7 dx}{1 - \operatorname{ctg}\left(\frac{2x + 4}{9}\right)}$.
9. $\int_1^3 16e^{-1x} \cos^2 x dx$.
10. $\int_2^5 \frac{\ln(4 + 3x) dx}{x^2}$.
11. $\int (7x + 6)^n dx$
12. $\int \frac{9x dx}{(5x + 3)}$
13. $\int \frac{6x^2 dx}{(8x + 3)}$
14. $\int \frac{7 dx}{3x^2 - 12x + 60}$
15. $\int \frac{(6x - 3) dx}{4x^2 + 8x + 68}$
16. $\int \frac{9x dx}{(5 + 10x^2)^2}$
17. $\int \frac{2x^2 dx}{3 - 11x^2}$
18. $\int \sqrt{x^3}(2 - 3x) dx$
19. $\int \frac{3x dx}{\sqrt{7 - 4x}}$
20. $\int \frac{2 dx}{\sqrt{2x^2 - 18x + 40}}$
21. $\int \frac{7x dx}{\sqrt{11 + 3x^2}}$
22. $\int (4x + 3) \left(\sin(6x + 1) + \cos(6x + 1) \right) dx$
23. $\int 8 \sin^2(6x + 2) \cos(6x + 2) dx$
24. $\int \frac{8 \sin x dx}{1 - \sin(5x + 7)}$
25. $\int 9 \cos(2x + 6) \sqrt{1 + 6 \sin^2(2x + 6)} dx$
26. $\int \frac{4 dx}{\sin^3(5x + 6) \cos^3(5x + 6)}$
27. $\int \frac{9 \sin^2(4x - 6) dx}{\cos^4(4x - 6)}$
28. $\int \cos(2x - 6) \cos(3x + 4) dx$
29. $\int \operatorname{tg}^2(2x + 3) dx$
30. $\int \arcsin(7x + 2) dx$
31. $\int e^{7x} \sin^2(9x - 6) dx$
32. $\int \operatorname{sh}(3x - 6) \operatorname{ch}^2(3x - 6) dx$
33. $\int 3 \ln^2(2x + 6) dx$
34. $\int \frac{(5x^2 - 5x - 2) dx}{6x^2 + 84x + 294}$
35. $\int \frac{8 dx}{9x^2 + x^4}$
36. $\int \frac{(4x + 2) dx}{(x^2 + 2x - 35)(x^2 - 11x + 30)}$
37. $\int \sqrt{7x^2 - 56x + 119} dx$
38. $\int \frac{5x^2 - 13x + 4}{x^3 - 4x^2 + 4x} dx$
39. $\int \frac{9 dx}{5 - 5x^{5/2}}$
40. $\int 5x(8x + 2)^{11} dx$

Вариант 4

1. $\int_3^6 \frac{x dx}{(3 + 6x)^2}$.
2. $\int_2^8 \frac{15dx}{(7 + 5x)(-3 + 5x)}$.
3. $\int_3^5 \frac{15x^2 dx}{4 - x^2}$.
4. $\int_2^7 \frac{16x^2 dx}{\sqrt{-4 + 4x}}$.
5. $\int_2^5 \frac{x^2 dx}{\sqrt{36 - x^2}}$.
6. $\int_5^6 \frac{25 dx}{64 + 16 \cos^2 x}$.
7. $\int_{-1}^0 \frac{9 \operatorname{tg}(\frac{4x + 7}{9}) dx}{1 + \cos(\frac{4x + 7}{9})}$.
8. $\int_3^4 \frac{7 dx}{\operatorname{tg}(\frac{3x + 4}{7}) - 1}$.
9. $\int_1^2 14e^{1x} \sin^2 x dx$.
10. $\int_3^6 x \ln(5 + 8x) dx$.
11. $\int x(2x + 3)(5x + 2) dx$
12. $\int \frac{9 dx}{(2x + 3)^2}$
13. $\int \frac{2 dx}{x(5x + 4)}$
14. $\int \frac{5 dx}{4x^2 - 36x + 56}$
15. $\int \frac{(6x - 5) dx}{5x^2 - 30x + 45}$
16. $\int \frac{(5x - 2) dx}{10 + 1x^2}$
17. $\int \frac{2x dx}{(3 - 3x^2)^2}$
18. $\int \sqrt{x}(2 - 3x) dx$
19. $\int \sqrt{5 - 7x} dx$
20. $\int \frac{7 dx}{\sqrt{4x^2 - 40x + 96}}$
21. $\int \frac{7x dx}{\sqrt{11x^2 + 9}}$
22. $\int 5x^2 \sin(6x + 2) dx$
23. $\int 7 \sin^3(9x - 1) dx$
24. $\int \frac{3 dx}{1 - \cos(5x + 3)}$
25. $\int 3 \cos(4x - 4) \sqrt{1 + 7 \sin^2(4x - 4)} dx$
26. $\int \frac{5 dx}{\sin(2x - 4) \cos^2(2x - 4)}$
27. $\int \frac{5 \cos^2(2x + 4) dx}{\sin^4(2x + 4)}$
28. $\int \sin(8x - 2) \cos(5x - 2) dx$
29. $\int \operatorname{tg}^3(3x - 3) dx$
30. $\int \operatorname{arcctg}(6x - 5) dx$
31. $\int (7x^2 - 4x + 8)8^{x+4} dx$
32. $\int \frac{x dx}{\operatorname{ch}^2(4x - 3)}$
33. $\int \frac{\ln(5x - 6) dx}{(5x - 6)^2}$
34. $\int \frac{(3x^2 - 5x - 4) dx}{4x^2 + 48x + 140}$
35. $\int \frac{(8x - 3) dx}{16x^2 - x^4}$
36. $\int \frac{(4x - 2) dx}{(x^2 - 5x - 6)(x^2 - 7x + 6)}$
37. $\int \sqrt{6x^2 + 84x + 390} dx$
38. $\int \frac{x^2 - 3x - 27}{x^4 - 9x^2} dx$
39. $\int \frac{(8 - 5x) dx}{4 + \sqrt{x}}$
40. $\int 4x(2x - 6)^6 dx$

Вариант 5

1. $\int_2^4 \frac{x dx}{(5-3x)^3}$.
2. $\int_2^5 \frac{17 dx}{x^2(5+5x)}$.
3. $\int_1^4 \frac{x dx}{4x^2-6x+3}$.
4. $\int_2^7 \frac{12\sqrt{x} dx}{9-16x}$.
5. $\int_3^7 \frac{20 dx}{(196-x^2)^{3/2}}$.
6. $\int_5^6 \frac{20 dx}{36+81\cos^2 x}$.
7. $\int_4^5 \frac{6 \operatorname{ctg}\left(\frac{3x+6}{7}\right) dx}{1-\sin\left(\frac{3x+6}{7}\right)}$.
8. $\int_3^4 \frac{4 \operatorname{tg}\left(\frac{3x+3}{9}\right) dx}{\operatorname{tg}\left(\frac{3x+3}{9}\right)-1}$.
9. $\int_1^6 17e^{-2x} \cos^2 x dx$.
10. $\int_2^4 \frac{\ln(3+6x) dx}{x^2}$.
11. $\int (6x+3)^2(5x+3)^2 dx$
12. $\int \frac{6 dx}{(3x+3)^3}$
13. $\int \frac{9 dx}{x(8x-6)}$
14. $\int \frac{5 dx}{5x^2-15x-50}$
15. $\int \frac{(3x-6) dx}{4x^2+32x+64}$
16. $\int \frac{(x^2+4) dx}{11+3x^2}$
17. $\int \frac{(9x-4) dx}{5-4x^2}$
18. $\int (4-6x)(4+4\sqrt{x^3}) dx$
19. $\int \frac{7 dx}{\sqrt{3x+6}}$
20. $\int \frac{5 dx}{\sqrt{7x^2+98x+455}}$
21. $\int \frac{5x dx}{\sqrt{6+5x^2}}$
22. $\int (3x-2) \left(\sin(4x-1) + \cos(4x-1) \right) dx$
23. $\int 7 \sin(5x-5) \cos^2(5x-5) dx$
24. $\int \frac{8 \cos x dx}{1-\cos(6x-3)}$
25. $\int \frac{5 dx}{5+3\sin^2(6x+1)}$
26. $\int \frac{9 dx}{\sin(2x+7) \cos^2(2x+7)}$
27. $\int \frac{8 \sin^2(6x-1) dx}{\cos(6x-1)}$
28. $\int \cos(5x-7) \cos(4x+5) dx$
29. $\int \operatorname{tg}^4(3x+4) dx$
30. $\int x \operatorname{arcctg}(6x-7) dx$
31. $\int \frac{8 dx}{1+e^{6x+6}}$
32. $\int \operatorname{sh}(4x+4) \operatorname{ch}(4x+4) dx$
33. $\int 8 \ln^2(5x+1) dx$
34. $\int \frac{(3x^2+4x-3) dx}{7x^2+7x-140}$
35. $\int \frac{2 dx}{512-x^3}$
36. $\int \frac{(4x-5) dx}{(x^2+2x-15)(x^2+4x-5)}$
37. $\int \sqrt{5x^2-20x+145} dx$
38. $\int \frac{7x^2+0x-21}{x^4-5x^3} dx$
39. $\int \frac{(2-6x) dx}{8+\sqrt{x}}$
40. $\int 5x(8x+2)^{11} dx$

Вариант 6

1. $\int_3^8 \frac{x dx}{(4 + 5x)^3}$.
2. $\int_1^6 \frac{21 dx}{x(7 - 2x)^2}$.
3. $\int_2^4 \frac{x dx}{4x^2 - 4x - 4}$.
4. $\int_2^6 \frac{15 dx}{(4 + 9x)\sqrt{x^3}}$.
5. $\int_3^9 \frac{22 dx}{(4 + x^2)^{3/2}}$.
6. $\int_7^8 \frac{22 dx}{4 + 36 \cos^2 x}$.
7. $\int_4^5 \frac{6 \operatorname{ctg}(\frac{3x + 6}{7}) dx}{1 - \sin(\frac{3x + 6}{7})}$.
8. $\int_{-3}^{-2} 8 \operatorname{tg}^4(\frac{2x + 7}{8}) dx$.
9. $\int_0^2 19e^{-4x} \sin^2 x dx$.
10. $\int_3^7 \frac{\ln(7 + 8x) dx}{x^2}$.
11. $\int (8x + 5)^n dx$
12. $\int \frac{7x dx}{(6x - 5)}$
13. $\int \frac{4 dx}{x(3x - 2)}$
14. $\int \frac{6 dx}{6x^2 + 36x + 204}$
15. $\int \frac{(5x - 4) dx}{7x^2 + 42x + 63}$
16. $\int \frac{2x dx}{(5 + 8x^2)^2}$
17. $\int \frac{5x^2 dx}{2 - 8x^2}$
18. $\int (7 - 2\sqrt{x})(6 - 1\sqrt{x^3}) dx$
19. $\int \frac{\sqrt{7 + 5x} dx}{5}$
20. $\int \frac{5 dx}{\sqrt{6x^2 - 48x + 90}}$
21. $\int \sqrt{5x^2 + 10} dx$
22. $\int 8x^2 \sin(5x + 1) dx$
23. $\int 4 \sin^3(3x - 6) dx$
24. $\int \frac{4 dx}{\cos(8x + 6)}$
25. $\int 5 \sin(4x + 6) \sqrt{1 + 9 \cos^2(4x + 6)} dx$
26. $\int \frac{4 dx}{\sin^2(2x + 1) \cos(2x + 1)}$
27. $\int \frac{7 \cos(3x - 3) dx}{\sin^2(3x - 3)}$
28. $\int \cos(5x + 1) \cos(7x - 3) dx$
29. $\int \operatorname{tg}^4(3x + 2) dx$
30. $\int \arcsin(3x - 4) dx$
31. $\int (3x^2 - 1x + 5)2^{x+5} dx$
32. $\int \frac{x dx}{\operatorname{ch}^2(5x - 5)}$
33. $\int \frac{\ln(2x - 6) dx}{14x - 42}$
34. $\int \frac{(3x^2 + 2x - 4) dx}{4x^2 + 48x + 148}$
35. $\int \frac{9 dx}{125 + x^3}$
36. $\int \frac{(3x - 7) dx}{(x^2 + 2x - 24)(x^2 - 10x + 24)}$
37. $\int \sqrt{5x^2 - 30x + 25} dx$
38. $\int \frac{5x^2 - 8x + 90}{x^3 + 125} dx$
39. $\int \frac{8 dx}{x\sqrt{7 + 6x}}$
40. $\int 4x^2(5x - 2)^9 dx$

Вариант 7

1. $\int_2^4 \frac{x dx}{(7 + 5x)^3}$.
2. $\int_3^9 \frac{22 dx}{x(3 + 6x)}$.
3. $\int_1^5 \frac{x dx}{3x^2 - 3x + 3}$.
4. $\int_2^6 \frac{11x^2 dx}{\sqrt{-4 + 6x}}$.
5. $\int_1^6 \frac{x^3 dx}{\sqrt{121 - x^2}}$.
6. $\int_9^{10} \frac{29 dx}{64 - 16 \cos^2 x}$.
7. $\int_2^3 \frac{5 \operatorname{ctg}(\frac{7x + 7}{9}) dx}{1 + \sin(\frac{7x + 7}{9})}$.
8. $\int_2^3 \frac{9 dx}{\operatorname{tg}(\frac{5x + 2}{8}) - 1}$.
9. $\int_0^5 15e^{-1x} \sin^2 x dx$.
10. $\int_2^4 5 \cos(\ln(6x + 6)) dx$.
11. $\int (2x - 1)(3x + 3) dx$
12. $\int \frac{6x dx}{(8x - 3)^2}$
13. $\int \frac{4x dx}{(3x + 2)^2}$
14. $\int \frac{2 dx}{5x^2 - 70x + 245}$
15. $\int \frac{(5x + 6) dx}{2x^2 - 16x + 130}$
16. $\int \frac{6x dx}{9 + 3x^2}$
17. $\int \frac{2x^2 dx}{10 - 4x^2}$
18. $\int (2 - 3x)(8 + 1\sqrt{x^3}) dx$
19. $\int \frac{\sqrt{7x + 1} dx}{3 dx}$
20. $\int \frac{3 dx}{x\sqrt{8736x^2 - 4032x + 6}}$
21. $\int \sqrt{8x^2 - 4} dx$
22. $\int 2x^2 \sin(5x + 4) dx$
23. $\int 5 \sin^2(9x + 5) \cos(9x + 5) dx$
24. $\int \frac{2x dx}{1 + \sin(8x + 4)}$
25. $\int 2 \sin(6x + 4) \sqrt{1 - 5 \sin^2(6x + 4)} dx$
26. $\int \frac{9 dx}{\sin(8x + 5) \cos(8x + 5)}$
27. $\int \frac{2 \cos^3(5x - 4) dx}{\sin(5x - 4)}$
28. $\int \cos(3x + 2) \cos(2x + 4) dx$
29. $\int \operatorname{ctg}^2(2x - 5) dx$
30. $\int x \arccos(8x - 3) dx$
31. $\int e^{7x} \sin^2(4x - 1) dx$
32. $\int x \operatorname{sh}(6x - 3) dx$
33. $\int \frac{\ln(8x - 3) dx}{32x - 12}$
34. $\int \frac{(5x^2 + 6x - 5) dx}{3x^2 - 6x - 72}$
35. $\int \frac{(6x - 6) dx}{4x^2 + x^4}$
36. $\int \frac{(4x + 5) dx}{(x^2 + 1x - 30)(x^2 + 3x - 18)}$
37. $\int \sqrt{2x^2 - 12x + 68} dx$
38. $\int \frac{-5x^2 - 3x - 52}{x^3 - 64} dx$
39. $\int \frac{(7 + 1x) dx}{8 + \sqrt{x}}$
40. $\int 9x^2(8x - 4)^7 dx$

Вариант 8

1. $\int_1^4 \frac{x^2 dx}{(6+2x)^2}$.
2. $\int_1^3 \frac{12dx}{x(3+6x)}$.
3. $\int_2^6 \frac{11dx}{x(25+x^2)}$.
4. $\int_3^6 \frac{12 dx}{\sqrt{4+5x}\sqrt{10+2x}}$.
5. $\int_6^8 \frac{x^2 dx}{\sqrt{x^2-16}}$.
6. $\int_5^6 \frac{23 dx}{81-36 \sin^2 x}$.
7. $\int_2^3 \frac{9 \cos(\frac{2x+4}{5}) dx}{\sin(\frac{2x+4}{5}) + \cos(\frac{2x+4}{5})}$.
8. $\int_2^3 4 \operatorname{tg}^3(\frac{2x+4}{7}) dx$.
9. $\int_3^8 \frac{8 dx}{7+5e^{-3x}}$.
10. $\int_4^4 x^3 \ln(16+x^2) dx$.
11. $\int_1^1 (8x-1)^n dx$
12. $\int \frac{(8x-6) dx}{(5x+1)}$
13. $\int \frac{2 dx}{x(7x+7)}$
14. $\int \frac{3 dx}{6x^2-72x+216}$
15. $\int \frac{(6x+3) dx}{5x^2-20x+65}$
16. $\int \frac{2x dx}{4+6x^2}$
17. $\int \frac{(9x+6) dx}{11-3x^2}$
18. $\int (7-2\sqrt{x})(8-6\sqrt{x}) dx$
19. $\int x\sqrt{3+6x} dx$
20. $\int \frac{5 dx}{x\sqrt{840x^2-840x+6}}$
21. $\int \sqrt{9x^2-7} dx$
22. $\int (5x+6) \sin^2(8x+1) dx$
23. $\int 7 \sin^4(6x+1) dx$
24. $\int \frac{4 dx}{\cos(8x+6)}$
25. $\int \frac{9 \sin(7x-7) dx}{\sqrt{1+9 \sin^2(7x-7)}}$
26. $\int \frac{6 dx}{\sin^3(5x-2) \cos^3(5x-2)}$
27. $\int \frac{2 \sin(6x-5) dx}{\cos^2(6x-5)}$
28. $\int \cos(7x-3) \cos(6x-6) dx$
29. $\int \operatorname{tg}^3(4x+3) dx$
30. $\int x \arcsin(4x-1) dx$
31. $\int e^{8x} \cos(9x+1) dx$
32. $\int x \operatorname{ch}(8x-2) dx$
33. $\int 6x^3 \ln(3x+3) dx$
34. $\int \frac{(4x^2+2x-6) dx}{7x^2-56x+455}$
35. $\int \frac{9 dx}{81-x^4}$
36. $\int \frac{(2x-3) dx}{(x^2-5x-14)(x^2-4x-21)}$
37. $\int \sqrt{7x^2-98x+595} dx$
38. $\int \frac{7x^2+18x-80}{x^4-32x^2+256} dx$
39. $\int \frac{(4-7x) dx}{2+\sqrt[3]{x}}$
40. $\int 2x(8x-7)^9 dx$

Вариант 9

1. $\int_2^6 \frac{x^3 dx}{3 + 8x}$
2. $\int_1^3 \frac{17x dx}{(7 + x)(2 + x)}$
3. $\int_2^6 \frac{13x^2 dx}{1 - x^2}$
4. $\int_3^6 \frac{8x dx}{\sqrt{4 + 2x}}$
5. $\int_3^7 \frac{x^3 dx}{\sqrt{1 + x^2}}$
6. $\int_2^3 \frac{20 dx}{4 + 16 \sin^2 x}$
7. $\int_2^3 \frac{4 \cos(\frac{7x + 6}{15}) dx}{\sin(\frac{7x + 6}{15}) - \cos(\frac{7x + 6}{15})}$
8. $\int_6^7 \frac{2 dx}{1 + \operatorname{ctg}(\frac{6x + 6}{7})}$
9. $\int_2^4 16e^{1x} \sin^2 x dx$
10. $\int_1^4 4 \sin(\ln(3x + 8)) dx$
11. $\int_1^4 x(8x + 1)(6x - 6) dx$
12. $\int \frac{3 dx}{(8x - 3)^2}$
13. $\int \frac{dx}{(3x + 4)(7x + 4)}$
14. $\int \frac{3 dx}{2x^2 + 20x + 122}$
15. $\int \frac{(3x - 3) dx}{4x^2 + 40x + 104}$
16. $\int \frac{(5x - 4) dx}{4 + 10x^2}$
17. $\int \frac{8x dx}{(10 - 7x^2)^2}$
18. $\int \sqrt{x^3}(5 - 4x) dx$
19. $\int x \sqrt{(2 + 4x)^3} dx$
20. $\int \frac{6 dx}{\sqrt{6x^2 + 48x + 72}}$
21. $\int \sqrt{9 + 9x^2} dx$
22. $\int (7x - 1) \sin^2(3x - 3) dx$
23. $\int 8 \sin^2(4x - 6) \cos(4x - 6) dx$
24. $\int \frac{9 \cos x dx}{1 + \cos(5x + 4)}$
25. $\int 4 \sin(8x + 7) \sqrt{1 - 2 \cos^2(8x + 7)} dx$
26. $\int \frac{3 dx}{\sin(6x + 3) \cos(6x + 3)}$
27. $\int \frac{5 \sin^2(6x + 6) dx}{\cos^4(6x + 6)}$
28. $\int \sin(2x - 6) \sin(4x - 5) dx$
29. $\int \operatorname{tg}^3(4x - 1) dx$
30. $\int \operatorname{arcctg}(2x + 3) dx$
31. $\int \frac{4 dx}{1 + e^{2x+6}}$
32. $\int x^2 \operatorname{sh}(3x + 5) dx$
33. $\int 9x^2 \ln(8x + 7) dx$
34. $\int \frac{(4x^2 - 7x + 6) dx}{5x^2 - 10x - 175}$
35. $\int \frac{9 dx}{4x^2 + x^4}$
36. $\int \frac{(2x + 6) dx}{(x^2 + 5x + 6)(x^2 + 6x + 8)}$
37. $\int \sqrt{-6x^2 + 84x - 270} dx$
38. $\int \frac{15x^2 - 3x + 112}{x^4 - 256} dx$
39. $\int \frac{7 dx}{6 - 3x^{3/6}}$
40. $\int 8x^2(4x - 5)^9 dx$

Вариант 10

1. $\int_3^6 \frac{x^3 dx}{7 + 11x}$.
2. $\int_1^7 \frac{22dx}{x(5 + 4x)}$.
3. $\int_2^5 \frac{x dx}{4x^2 - 5x + 4}$.
4. $\int_1^6 \frac{13dx}{(9 - 16x)\sqrt{x^3}}$.
5. $\int_2^6 \frac{16 dx}{(225 - x^2)^{3/2}}$.
6. $\int_2^3 \frac{18 dx}{9 + 81 \sin^2 x}$.
7. $\int_2^4 \frac{8 \operatorname{tg}(\frac{6x + 4}{9}) dx}{1 - \cos(\frac{6x + 4}{9})}$.
8. $\int_4^5 \frac{7 \operatorname{tg}(\frac{2x + 4}{7}) dx}{\operatorname{tg}(\frac{2x + 4}{7}) - 1}$.
9. $\int_0^1 20e^{-1x} \sin^2 x dx$.
10. $\int_3^6 \frac{\ln(3 + 6x) dx}{x^2}$.
11. $\int (3x + 1)(7x - 5) dx$
12. $\int \frac{8x dx}{(6x + 7)}$
13. $\int \frac{9x^2 dx}{(4x + 3)}$
14. $\int \frac{7 dx}{6x^2 - 24x + 24}$
15. $\int \frac{(2x + 1) dx}{2x^2 - 8x + 8}$
16. $\int \frac{2x^2 dx}{3 + 6x^2}$
17. $\int \frac{(x^2 + 3) dx}{7 - 8x^2}$
18. $\int \sqrt{x^3}(3 - 5\sqrt{x}) dx$
19. $\int \frac{3x dx}{\sqrt{7 - 4x}}$
20. $\int \frac{4 dx}{\sqrt{3x^2 + 42x + 150}}$
21. $\int \frac{2x dx}{\sqrt{11x^2 - 5}}$
22. $\int (6x - 4) \cos(3x + 6) dx$
23. $\int \frac{8 \sin^3(9x - 6) dx}{7 dx}$
24. $\int \frac{dx}{1 + \cos(5x + 2)}$
25. $\int 2 \sin(5x + 2) \sqrt{1 + 9 \cos^2(5x + 2)} dx$
26. $\int \frac{7 dx}{\sin^4(4x + 5) \cos^2(4x + 5)}$
27. $\int \frac{8 \cos(6x + 2) dx}{\sin^2(6x + 2)}$
28. $\int \cos(3x - 1) \cos(8x - 2) dx$
29. $\int \operatorname{ctg}^4(3x - 7) dx$
30. $\int \arcsin(3x - 7) dx$
31. $\int \frac{e^{5x} \sin(9x - 1) dx}{x dx}$
32. $\int \frac{dx}{\operatorname{ch}^2(2x - 6)}$
33. $\int 2 \ln^2(4x + 7) dx$
34. $\int \frac{(2x^2 - 2x + 7) dx}{5x^2 + 70x + 290}$
35. $\int \frac{5 dx}{8 + x^3}$
36. $\int \frac{(3x + 7) dx}{(x^2 - 2x - 35)(x^2 + 12x + 35)}$
37. $\int \sqrt{-5x^2 - 20x + 25} dx$
38. $\int \frac{x^2 + 0x - 16}{x^3 - 64} dx$
39. $\int \frac{2x^{3/2} + 1x^{5/3} + 4}{\sqrt{x}}$
40. $\int 4x^2(7x - 4)^9 dx$

Вариант 11

1. $\int_3^7 \frac{x^4 dx}{5 + 5x}$.
2. $\int_2^6 \frac{22dx}{x(5 - 2x)^2}$.
3. $\int_2^6 \frac{x dx}{2x^2 + 6x + 3}$.
4. $\int_2^5 \frac{16 dx}{\sqrt{5 + 2x}\sqrt{11 - 2x}}$.
5. $\int_6^{10} \frac{x^2 dx}{\sqrt{x^2 - 4}}$.
6. $\int_7^8 \frac{30 dx}{81 - 4 \cos^2 x}$.
7. $\int_4^6 \frac{7 \operatorname{ctg}(\frac{5x + 2}{7}) dx}{1 + \sin(\frac{5x + 2}{7})}$.
8. $\int_{-1}^1 5 \operatorname{tg}^3(\frac{4x + 6}{8}) dx$.
9. $\int_2^5 \frac{9 dx}{3 + 9e^{-3x}}$.
10. $\int_1^5 \frac{\ln(7 + 9x) dx}{x^2}$.
11. $\int x^n(5x - 3)^2 dx$
12. $\int \frac{4 dx}{(2x - 6)^3}$
13. $\int \frac{4 dx}{x^2(6x + 5)}$
14. $\int \frac{6 dx}{3x^2 + 18x - 21}$
15. $\int \frac{(6x - 1) dx}{5x^2 + 25x + 20}$
16. $\int \frac{(5x + 3) dx}{10 + 5x^2}$
17. $\int \frac{(x^2 + 4) dx}{6 - 8x^2}$
18. $\int (4 - 4\sqrt{x})(3 - 3\sqrt{x^3}) dx$
19. $\int \frac{8 dx}{\sqrt{3 + 6x}}$
20. $\int \frac{7 dx}{x\sqrt{42x^2 + 48x + 6}}$
21. $\int \sqrt{5x^2 - 5} dx$
22. $\int (6x + 3) \sin(5x + 2) dx$
23. $\int 7 \sin(4x - 3) \cos^2(4x - 3) dx$
24. $\int \frac{4 dx}{\sin(6x - 6)}$
25. $\int 7 \cos(6x + 4) \sqrt{1 + 8 \sin^2(6x + 4)} dx$
26. $\int \frac{6 dx}{\sin^4(5x + 3) \cos^2(5x + 3)}$
27. $\int \frac{7 \sin(5x + 5) dx}{\cos^3(5x + 5)}$
28. $\int \sin(6x + 5) \sin(5x - 1) dx$
29. $\int \operatorname{ctg}^3(6x - 2) dx$
30. $\int \operatorname{arctg}(6x - 4) dx$
31. $\int (4x - 4)2^{7x+4} dx$
32. $\int \frac{x dx}{\operatorname{sh}^2(6x + 1)}$
33. $\int 9 \ln(4x - 1) dx$
34. $\int \frac{(6x^2 + 1x + 6) dx}{3x^2 - 30x + 87}$
35. $\int \frac{3 dx}{216 + x^3}$
36. $\int \frac{(3x + 5) dx}{(x^2 + 6x - 7)(x^2 - 5x + 4)}$
37. $\int \sqrt{2x^2 - 28x + 116} dx$
38. $\int \frac{3x^2 - 34x + 120}{x^3 + 125} dx$
39. $\int \frac{(8 - 5x) dx}{4 + \sqrt{x}}$
40. $\int 9x(2x - 6)^{11} dx$

Вариант 12

1. $\int_3^6 \frac{x dx}{(7 + 3x)^3}$.
2. $\int_3^8 \frac{13 dx}{(7 + 7x)(-2 + 3x)}$.
3. $\int_3^9 \frac{15x^2 dx}{1 - x^2}$.
4. $\int_1^7 \frac{14\sqrt{x} dx}{1 - 25x}$.
5. $\int_3^8 \frac{x^3 dx}{\sqrt{x^2 - 1}}$.
6. $\int_9^{10} \frac{32 dx}{64 - 4 \cos^2 x}$.
7. $\int_3^4 \frac{10 \sin(\frac{5x + 6}{8}) dx}{\sin(\frac{5x + 6}{8}) - \cos(\frac{5x + 6}{8})}$.
8. $\int_4^6 \frac{6 dx}{1 - \operatorname{ctg}(\frac{2x + 5}{9})}$.
9. $\int_2^6 20e^{-3x} \cos^2 x dx$.
10. $\int_3^4 10 \cos(\ln(7x + 9)) dx$.
11. $\int (2x - 1)(7x - 6) dx$
12. $\int \frac{5x dx}{(7x - 6)}$
13. $\int \frac{3 dx}{x^2(2x - 5)}$
14. $\int \frac{6 dx}{7x^2 + 56x + 84}$
15. $\int \frac{(5x + 3) dx}{2x^2 + 12x + 20}$
16. $\int \frac{(8x - 5) dx}{7 + 6x^2}$
17. $\int \frac{(5x - 5) dx}{2 - 2x^2}$
18. $\int (7 + 6\sqrt{x})(5 + 1\sqrt{x^3}) dx$
19. $\int (\sqrt{6x + 6} + \sqrt{7x + 2}) dx$
20. $\int \frac{2 dx}{\sqrt{7x^2 + 70x + 175}}$
21. $\int \sqrt{9x^2 - 9} dx$
22. $\int (7x - 1) \sin^2(3x - 3) dx$
23. $\int 2 \sin(7x + 4) \cos^2(7x + 4) dx$
24. $\int \frac{7 dx}{1 + \cos(5x + 2)}$
25. $\int \frac{8 dx}{2 + 4 \sin^2(6x - 2)}$
26. $\int \frac{7 dx}{\sin^2(6x - 6) \cos^2(6x - 6)}$
27. $\int \frac{4 \sin^3(8x - 1) dx}{\cos(8x - 1)}$
28. $\int \cos(8x + 3) \cos(6x + 5) dx$
29. $\int \operatorname{tg}^4(2x - 6) dx$
30. $\int \operatorname{arctg}(8x - 6) dx$
31. $\int (3x + 3)5^{9x-6} dx$
32. $\int \operatorname{sh}^2(7x - 3) \operatorname{ch}(7x - 3) dx$
33. $\int 2 \ln(4x - 7) dx$
34. $\int \frac{(3x^2 + 4x - 3) dx}{7x^2 + 7x - 140}$
35. $\int \frac{7 dx}{8 + x^3}$
36. $\int \frac{(2x - 4) dx}{(x^2 - 0x - 1)(x^2 - 4x + 3)}$
37. $\int \sqrt{5x^2 - 30x + 25} dx$
38. $\int \frac{x^2 + 10x + 12}{x^3 - 216} dx$
39. $\int \frac{(7 + 5x) dx}{3 + \sqrt[3]{x}}$
40. $\int 8x^2(5x + 2)^{10} dx$

Вариант 13

1. $\int_2^7 \frac{x^3 dx}{7 + 10x}$
2. $\int_3^5 \frac{11dx}{x(7 - 4x)^2}$
3. $\int_1^5 \frac{6dx}{x^2(9 + x^2)}$
4. $\int_3^5 \frac{7 dx}{x\sqrt{3 + 2x}}$
5. $\int_1^6 \frac{x^3 dx}{\sqrt{81 - x^2}}$
6. $\int_9^{10} \frac{31 dx}{16 - 4 \cos^2 x}$
7. $\int_3^4 \frac{4 \operatorname{tg}\left(\frac{6x + 7}{10}\right) dx}{1 - \cos\left(\frac{6x + 7}{10}\right)}$
8. $\int_6^8 \frac{4 \operatorname{tg}\left(\frac{5x + 6}{3}\right) dx}{\operatorname{tg}\left(\frac{5x + 6}{3}\right) + 1}$
9. $\int_1^3 16e^{-4x} \cos^2 x dx$
10. $\int_3^6 x \ln(5 + 8x) dx$
11. $\int (3x - 5)^2(4x + 1)^2 dx$
12. $\int \frac{8x dx}{(4x - 1)^3}$
13. $\int \frac{6 dx}{x(7x + 2)}$
14. $\int \frac{2 dx}{3x^2 + 27x + 42}$
15. $\int \frac{(2x - 1) dx}{7x^2 + 98x + 455}$
16. $\int \frac{5x dx}{3 + 9x^2}$
17. $\int \frac{8x dx}{10 - 3x^2}$
18. $\int \sqrt{x}(3 + 2x) dx$
19. $\int \frac{3 dx}{\sqrt{(5 + 4x)^3}}$
20. $\int \frac{5 dx}{x\sqrt{22032x^2 + 2592x + 6}}$
21. $\int \frac{7x dx}{\sqrt{8x^2 - 3}}$
22. $\int (6x + 5) \sin^2(5x - 2) dx$
23. $\int 4 \sin^5(9x + 5) dx$
24. $\int \frac{5 \sin x dx}{1 - \sin(2x + 3)}$
25. $\int 3 \sin(6x + 5) \sqrt{1 + 8 \sin^2(6x + 5)} dx$
26. $\int \frac{9 dx}{\sin^2(8x - 6) \cos(8x - 6)}$
27. $\int \frac{5 \cos^2(2x + 4) dx}{\sin^4(2x + 4)}$
28. $\int \sin(5x - 6) \sin(6x + 4) dx$
29. $\int \operatorname{ctg}^4(2x + 6) dx$
30. $\int x \arccos(8x - 3) dx$
31. $\int \frac{2 dx}{1 + e^{8x-3}}$
32. $\int \frac{x dx}{\operatorname{ch}^2(2x - 6)}$
33. $\int 6x^2 \ln(7x + 2) dx$
34. $\int \frac{(3x^2 + 4x - 3) dx}{7x^2 + 7x - 140}$
35. $\int \frac{(8x + 2) dx}{16 - x^4}$
36. $\int \frac{(4x + 6) dx}{(x^2 + 8x + 12)(x^2 + 7x + 6)}$
37. $\int \sqrt{4x^2 - 24x + 136} dx$
38. $\int \frac{-3x^2 - 2x + 48}{x^4 - 32x^2 + 256} dx$
39. $\int \frac{(7 - 3x) dx}{9 + \sqrt{x}}$
40. $\int 4x^2(5x - 2)^9 dx$

Вариант 14

1. $\int_3^7 \frac{x^4 dx}{1 + 11x}$
2. $\int_2^8 \frac{16x dx}{(6 + x)(5 + x)}$
3. $\int_1^3 \frac{8dx}{x(9 + x^2)}$
4. $\int_3^8 \frac{16x^2 dx}{\sqrt{2 + 3x}}$
5. $\int_6^{10} \frac{x^3 dx}{\sqrt{x^2 - 9}}$
6. $\int_2^3 \frac{23 dx}{16 + 49 \sin^2 x}$
7. $\int_0^1 \frac{9 \operatorname{ctg}(\frac{6x + 6}{10}) dx}{1 + \sin(\frac{6x + 6}{10})}$
8. $\int_3^5 \frac{2 \operatorname{tg}(\frac{2x + 3}{7}) dx}{\operatorname{tg}(\frac{2x + 3}{7}) + 1}$
9. $\int_0^3 15e^{-3x} \sin^2 x dx$
10. $\int_7^7 x^3 \ln(36 + x^2) dx$
11. $\int_3^3 x^n (6x - 7)^2 dx$
12. $\int \frac{2x dx}{(3x - 6)^3}$
13. $\int \frac{2 dx}{x(8x - 5)}$
14. $\int \frac{6 dx}{7x^2 + 56x + 84}$
15. $\int \frac{(3x + 5) dx}{6x^2 + 12x + 30}$
16. $\int \frac{(4x + 3) dx}{3 + 5x^2}$
17. $\int \frac{(6x^2 + 9) dx}{4 - 7x^2}$
18. $\int (2 - 3\sqrt{x})(7 + 3\sqrt{x}) dx$
19. $\int (\sqrt{6x + 6} + \sqrt{7x + 2}) dx$
20. $\int \frac{7 dx}{\sqrt{3x^2 - 24x + 48}}$
21. $\int \sqrt{2x^2 - 7} dx$
22. $\int (5x + 1) (\sin(8x + 5) + \cos(8x + 5)) dx$
23. $\int 4 \sin(2x + 1) \cos^3(2x + 1) dx$
24. $\int \frac{6 \sin x dx}{1 + \sin(7x - 5)}$
25. $\int 8 \sin(6x + 5) \sqrt{1 + 9 \sin^2(6x + 5)} dx$
26. $\int \frac{6 dx}{\sin^3(8x + 7) \cos^3(8x + 7)}$
27. $\int \frac{4 \cos(7x - 6) dx}{\sin^2(7x - 6)}$
28. $\int \cos(8x + 2) \cos(7x + 2) dx$
29. $\int \operatorname{ctg}^4(6x - 3) dx$
30. $\int x \operatorname{arcctg}(6x - 7) dx$
31. $\int (6x - 7) 9^{2x-3} dx$
32. $\int x \operatorname{ch}(2x + 1) dx$
33. $\int (4x - 1) \ln(3x - 6) dx$
34. $\int \frac{(3x^2 - 4x + 1) dx}{2x^2 + 20x + 50}$
35. $\int \frac{2 dx}{36x^2 + x^4}$
36. $\int \frac{(3x + 1) dx}{(x^2 + 2x - 24)(x^2 + 1x - 30)}$
37. $\int \sqrt{-2x^2 - 8x + 24} dx$
38. $\int \frac{7x^2 + 18x - 80}{x^4 - 32x^2 + 256} dx$
39. $\int \frac{(5 - 3x) dx}{7 + \sqrt{x}}$
40. $\int 5x^2(4x - 2)^5 dx$

Вариант 15

1. $\int_3^9 \frac{x^3 dx}{6 + 9x}$
2. $\int_2^8 \frac{18dx}{x(7 + 3x)^2}$
3. $\int_3^8 \frac{x dx}{4x^2 - 6x - 6}$
4. $\int_1^7 \frac{15dx}{(4 + 36x)\sqrt{x^3}}$
5. $\int_6^8 \frac{x^2 dx}{\sqrt{x^2 - 16}}$
6. $\int_7^8 \frac{20 dx}{16 - 9 \sin^2 x}$
7. $\int_0^2 \frac{8 \operatorname{ctg}(\frac{2x+2}{10}) dx}{1 + \sin(\frac{2x+2}{10})}$
8. $\int_6^7 7 \operatorname{ctg}^3(\frac{6x+2}{8}) dx$
9. $\int_3^7 \frac{4 dx}{3 + 7e^{-5x}}$
10. $\int_6^6 x \ln(6 + 4x) dx$
11. $\int_2^2 (7x + 5)(6x + 5) dx$
12. $\int \frac{2 dx}{(7x + 6)^2}$
13. $\int \frac{2 dx}{x(7x + 2)}$
14. $\int \frac{6 dx}{2x^2 - 14x + 12}$
15. $\int \frac{(5x + 6) dx}{3x^2 + 27x + 42}$
16. $\int \frac{(2x + 4) dx}{6 + 2x^2}$
17. $\int \frac{2x^2 dx}{3 - 11x^2}$
18. $\int (7 - 6x)(5 + 2\sqrt{x^3}) dx$
19. $\int \sqrt{2x + 7} dx$
20. $\int \frac{2 dx}{x\sqrt{-24832x^2 - 16128x + 3}}$
21. $\int \frac{8x dx}{\sqrt{2x^2 + 2}}$
22. $\int (4x + 1) \sin(7x - 4) dx$
23. $\int 7 \sin^2(3x + 2) \cos(3x + 2) dx$
24. $\int \frac{8 \cos x dx}{1 + \cos(6x + 3)}$
25. $\int 9 \cos(3x - 2) \sqrt{1 - 5 \sin^2(3x - 2)} dx$
26. $\int \frac{8 dx}{\sin^3(4x + 2) \cos^3(4x + 2)}$
27. $\int \frac{6 \cos^2(2x + 7) dx}{\sin(2x + 7)}$
28. $\int \cos(3x + 2) \cos(2x + 4) dx$
29. $\int \operatorname{ctg}^4(4x + 5) dx$
30. $\int \operatorname{arccctg}(6x - 5) dx$
31. $\int e^{2x} \cos^2(4x + 2) dx$
32. $\int \frac{x dx}{\operatorname{sh}^2(2x - 1)}$
33. $\int 5x^2 \ln(8x - 4) dx$
34. $\int \frac{(4x^2 - 7x + 6) dx}{5x^2 - 10x - 175}$
35. $\int \frac{8 dx}{343 + x^3}$
36. $\int \frac{(5x - 1) dx}{(x^2 - 6x - 7)(x^2 - 0x - 49)}$
37. $\int \sqrt{7x^2 + 84x + 259} dx$
38. $\int \frac{-1x^2 - 3x - 18}{x^3 + 216} dx$
39. $\int \frac{(4 + 6x) dx}{3 + \sqrt[3]{x}}$
40. $\int 5x(8x - 2)^9 dx$

Вариант 16

1. $\int_2^4 \frac{x^2 dx}{(5+5x)^2}$.
2. $\int_2^5 \frac{22dx}{x^2(5+2x)}$.
3. $\int_3^6 \frac{17x^2 dx}{1-x^2}$.
4. $\int_3^6 \frac{10dx}{(9-4x)\sqrt{x^3}}$.
5. $\int_5^9 \frac{x^3 dx}{\sqrt{x^2-4}}$.
6. $\int_9^{10} \frac{35 dx}{49-4 \cos^2 x}$.
7. $\int_0^1 \frac{7 \operatorname{tg}(\frac{5x+3}{7}) dx}{1-\cos(\frac{5x+3}{7})}$.
8. $\int_0^1 4 \operatorname{tg}^4(\frac{3x+2}{6}) dx$.
9. $\int_3^8 \frac{10 dx}{3+3e^{-3x}}$.
10. $\int_5^5 x^3 \ln(25+x^2) dx$.
11. $\int_1^1 x(2x-2)(9x-4) dx$
12. $\int \frac{6x dx}{(4x+6)^3}$
13. $\int \frac{2 dx}{x(4x-3)}$
14. $\int \frac{5 dx}{5x^2+10x+50}$
15. $\int \frac{(5x-6) dx}{7x^2+14x+7}$
16. $\int \frac{6x^3 dx}{2+8x^2}$
17. $\int \frac{9x dx}{(6-3x^2)^2}$
18. $\int (6-7x^{8/2}) dx$
19. $\int \sqrt{2+5x} dx$
20. $\int \frac{2 dx}{x\sqrt{-3528x^2+1008x+4}}$
21. $\int \frac{2x dx}{\sqrt{10-7x^2}}$
22. $\int 4x^2 \sin(2x+1) dx$
23. $\int (4x+7 \sin^2(8x+2)) dx$
24. $\int \frac{2 dx}{\cos^3(8x-5)}$
25. $\int 8 \sin(8x-6) \sqrt{1-6 \sin^2(8x-6)} dx$
26. $\int \frac{5 dx}{\sin(6x+3) \cos(6x+3)}$
27. $\int \frac{2 \sin(4x-7) dx}{\cos^3(4x-7)}$
28. $\int \sin(7x-6) \cos(8x+2) dx$
29. $\int \operatorname{ctg}^4(4x+3) dx$
30. $\int x \operatorname{arcctg}(7x+7) dx$
31. $\int (2x+5)e^{6x+4} dx$
32. $\int \frac{x dx}{\operatorname{ch}^2(2x-7)}$
33. $\int 2 \ln(3x-7) dx$
34. $\int \frac{(5x^2-5x-2) dx}{6x^2+84x+294}$
35. $\int \frac{(6x+4) dx}{625-x^4}$
36. $\int \frac{(4x+5) dx}{(x^2+1x-30)(x^2+3x-18)}$
37. $\int \sqrt{-2x^2+20x-18} dx$
38. $\int \frac{x^2-30x+108}{x^3+216} dx$
39. $\int \frac{7 dx}{6-3x^{3/6}}$
40. $\int 8x(3x+2)^5 dx$

Вариант 17

1. $\int_1^5 \frac{x^2 dx}{(3 + 6x)^2}$.
2. $\int_3^7 \frac{17x dx}{(5 + x)(6 + x)}$.
3. $\int_3^6 \frac{x dx}{2x^2 + 5x + 1}$.
4. $\int_1^3 \frac{9 dx}{\sqrt{5 + 4x}\sqrt{14 - 2x}}$.
5. $\int_2^5 \frac{17 dx}{(1 + x^2)^{3/2}}$.
6. $\int_7^8 \frac{30 dx}{81 - 4 \cos^2 x}$.
7. $\int_5^6 \frac{9 \sin(\frac{5x + 6}{10}) dx}{\sin(\frac{5x + 6}{10}) + \cos(\frac{5x + 6}{10})}$.
8. $\int_{-1}^1 5 \operatorname{tg}^3(\frac{4x + 6}{8}) dx$.
9. $\int_0^5 17e^{-4x} \cos^2 x dx$.
10. $\int_1^5 \frac{\ln(7 + 9x) dx}{x^2}$.
11. $\int (6x + 5)^2(5x - 1)^2 dx$
12. $\int \frac{4 dx}{(8x + 7)^2}$
13. $\int \frac{8 dx}{x^2(5x - 3)}$
14. $\int \frac{7 dx}{3x^2 + 18x + 24}$
15. $\int \frac{(4x - 1) dx}{5x^2 + 10x - 120}$
16. $\int \frac{(x^2 + 8) dx}{4 + 5x^2}$
17. $\int \frac{6x dx}{(9 - 3x^2)^2}$
18. $\int \sqrt{x}(7 - 2\sqrt{x}) dx$
19. $\int \sqrt{\frac{8x - 3}{2x + 4}} dx$
20. $\int \frac{3 dx}{\sqrt{6x^2 - 12x + 6}}$
21. $\int \sqrt{7 - 4x^2} dx$
22. $\int (6x + 3) \sin(5x + 2) dx$
23. $\int 8 \sin^3(9x - 6) dx$
24. $\int \frac{9 \sin x dx}{1 + \sin(3x - 1)}$
25. $\int \frac{9 \sin(5x - 7) dx}{\sqrt{1 - 2 \sin^2(5x - 7)}}$
26. $\int \frac{4 dx}{\sin^3(3x + 3) \cos^3(3x + 3)}$
27. $\int \frac{8 \sin^2(5x + 5) dx}{\cos^4(5x + 5)}$
28. $\int \cos(5x - 6) \cos(8x + 4) dx$
29. $\int \operatorname{tg}^2(5x - 3) dx$
30. $\int x \operatorname{arctg}(8x - 5) dx$
31. $\int (3x^2 + 4x + 6)e^{x-3} dx$
32. $\int \operatorname{sh}^2(3x - 7) \operatorname{ch}(3x - 7) dx$
33. $\int 9 \ln(3x - 5) dx$
34. $\int \frac{(4x^2 + 7x + 3) dx}{2x^2 - 24x + 72}$
35. $\int \frac{(4x - 1) dx}{36x^2 + x^4}$
36. $\int \frac{(6x - 6) dx}{(x^2 - 7x + 6)(x^2 - 11x + 30)}$
37. $\int \sqrt{7x^2 - 14x - 21} dx$
38. $\int \frac{7x^2 + 3x + 27}{x^3 + 27} dx$
39. $\int \frac{3x^{3/2} + 7x^{2/3} + 5}{\sqrt{x}} dx$
40. $\int 6x(3x - 5)^7 dx$

Вариант 18

1. $\int_1^3 \frac{x^2 dx}{(4 + 5x)^2}$.
2. $\int_2^6 \frac{15 dx}{(6 + 6x)(5 + 4x)}$.
3. $\int_3^5 \frac{8 dx}{x^2(16 + x^2)}$.
4. $\int_2^4 \frac{16x^2 dx}{\sqrt{-3 + 3x}}$.
5. $\int_6^{10} \frac{x^3 dx}{\sqrt{x^2 - 9}}$.
6. $\int_9^{10} \frac{19 dx}{16 + 49 \sin^2 x}$.
7. $\int_0^1 \frac{7 \operatorname{tg}\left(\frac{5x + 3}{7}\right) dx}{1 - \cos\left(\frac{5x + 3}{7}\right)}$.
8. $\int_3^4 \frac{2 dx}{1 + \operatorname{ctg}\left(\frac{6x + 5}{8}\right)}$.
9. $\int_1^5 18e^{1x} \cos^2 x dx$.
10. $\int_1^2 10 \cos(\ln(5x + 8)) dx$.
11. $\int_1^1 x(8x + 1)(6x - 3) dx$
12. $\int \frac{4 dx}{(8x + 2)^3}$
13. $\int \frac{dx}{(5x - 6)(8x - 6)}$
14. $\int \frac{dx}{5x^2 + 55x + 150}$
15. $\int \frac{(5x + 6) dx}{2x^2 - 18x + 40}$
16. $\int \frac{(8x + 3) dx}{5 + 7x^2}$
17. $\int \frac{8x^3 dx}{10 - 5x^2}$
18. $\int \sqrt{x}(2 - 2x) dx$
19. $\int \frac{9 dx}{\sqrt{2 - 3x}}$
20. $\int \frac{5 dx}{x\sqrt{-126x^2 - 24x + 3}}$
21. $\int \sqrt{4 + 9x^2} dx$
22. $\int (6x + 7) \cos(3x + 2) dx$
23. $\int 7 \sin(6x - 6) \cos^3(6x - 6) dx$
24. $\int \frac{3 dx}{1 - \sin(7x - 2)}$
25. $\int \frac{5 dx}{2 - 4 \cos(9x - 4)}$
26. $\int \frac{7 dx}{\sin^2(2x - 3) \cos(2x - 3)}$
27. $\int \frac{3 \sin^2(5x + 5) dx}{\cos(5x + 5)}$
28. $\int \cos(2x - 6) \cos(3x + 4) dx$
29. $\int \operatorname{ctg}^2(3x - 7) dx$
30. $\int \operatorname{arcctg}(8x + 7) dx$
31. $\int e^{5x} \sin(9x - 3) dx$
32. $\int x \operatorname{sh}(4x + 4) dx$
33. $\int \frac{\ln(5x + 2) dx}{40x + 16}$
34. $\int \frac{(4x^2 - 5x + 7) dx}{3x^2 - 42x + 195}$
35. $\int \frac{(7x - 3) dx}{1x^2 - x^4}$
36. $\int \frac{(5x - 3) dx}{(x^2 - 11x + 28)(x^2 - 6x + 8)}$
37. $\int \sqrt{4x^2 - 56x + 296} dx$
38. $\int \frac{8x^2 - 5x + 300}{x^4 - 625} dx$
39. $\int \frac{(6 - 1x) dx}{8 + \sqrt{x}}$
40. $\int \frac{9x^2 dx}{(7x - 7)^7}$

Вариант 19

1. $\int_2^5 \frac{x^4 dx}{4 + 6x}$
2. $\int_1^4 \frac{22dx}{x(4 + 5x)}$
3. $\int_2^8 \frac{7dx}{x^2(4 + x^2)}$
4. $\int_2^4 \frac{14dx}{(1 + 25x)\sqrt{x^3}}$
5. $\int_3^7 \frac{x^2 dx}{\sqrt{1 + x^2}}$
6. $\int_9^{10} \frac{24 dx}{64 - 25 \sin^2 x}$
7. $\int_5^7 \frac{6 \operatorname{tg}\left(\frac{3x + 3}{11}\right) dx}{1 + \cos\left(\frac{3x + 3}{11}\right)}$
8. $\int_3^5 \frac{6 dx}{1 + \operatorname{ctg}\left(\frac{4x + 2}{4}\right)}$
9. $\int_2^7 20e^{-4x} \sin^2 x dx$
10. $\int_3^6 6 \cos(\ln(7x + 3)) dx$
11. $\int (8x - 1)^2(4x + 6)^2 dx$
12. $\int \frac{4x dx}{(5x + 6)^2}$
13. $\int \frac{3 dx}{x(7x - 5)}$
14. $\int \frac{3 dx}{5x^2 - 5x - 150}$
15. $\int \frac{(3x - 3) dx}{3x^2 - 6x + 3}$
16. $\int \frac{2x dx}{3 + 2x^2}$
17. $\int \frac{8x^3 dx}{11 - 11x^2}$
18. $\int \sqrt{x^3}(6 - 7x) dx$
19. $\int \frac{3 dx}{\sqrt{4 + 1x}}$
20. $\int \frac{3 dx}{\sqrt{4x^2 - 4x - 8}}$
21. $\int \frac{6x dx}{\sqrt{8 + 10x^2}}$
22. $\int (7x + 7) \cos(3x + 2) dx$
23. $\int 4 \sin^2(2x - 1) \cos(2x - 1) dx$
24. $\int \frac{5 dx}{\cos(8x - 2)}$
25. $\int \frac{8 dx}{8 + 6 \cos(9x + 4)}$
26. $\int \frac{7 dx}{\sin^2(6x - 6) \cos^2(6x - 6)}$
27. $\int \frac{5 \sin(2x - 7) dx}{\cos^3(2x - 7)}$
28. $\int \cos(2x - 6) \cos(3x + 4) dx$
29. $\int \operatorname{ctg}^2(4x + 1) dx$
30. $\int x \operatorname{arctg}(7x - 3) dx$
31. $\int (4x - 4)2^{7x+4} dx$
32. $\int x \operatorname{sh}(8x - 2) dx$
33. $\int 5x^2 \ln(2x - 7) dx$
34. $\int \frac{(2x^2 - 1x - 5) dx}{5x^2 - 20x + 20}$
35. $\int \frac{(8x + 2) dx}{16 - x^4}$
36. $\int \frac{(2x - 4) dx}{(x^2 - 1x - 30)(x^2 + 1x - 42)}$
37. $\int \sqrt{-2x^2 + 4x + 96} dx$
38. $\int \frac{3x^2 - 32x + 72}{x^3 - 12x^2 + 36x} dx$
39. $\int \frac{(2 - 6x) dx}{8 + \sqrt{x}}$
40. $\int 3x^2(7x + 6)^5 dx$

Вариант 20

1. $\int_3^5 \frac{x^2 dx}{(6-6x)^2}$.
2. $\int_1^3 \frac{10dx}{x^2(6-3x)}$.
3. $\int_1^7 \frac{x dx}{3x^2-4x+4}$.
4. $\int_3^9 \frac{9dx}{(4-25x)\sqrt{x^3}}$.
5. $\int_2^5 \frac{19 dx}{(1+x^2)^{3/2}}$.
6. $\int_9^{10} \frac{30 dx}{81-36 \cos^2 x}$.
7. $\int_4^5 \frac{4 \sin(\frac{2x+5}{10}) dx}{\sin(\frac{2x+5}{10}) - \cos(\frac{2x+5}{10})}$.
8. $\int_0^1 5 \operatorname{ctg}^3(\frac{4x+3}{9}) dx$.
9. $\int_1^3 16e^{-4x} \cos^2 x dx$.
10. $\int_3^7 x \ln(6+6x) dx$.
11. $\int_3^7 x(6x-1)(7x-1) dx$
12. $\int \frac{4x dx}{(5x-4)}$
13. $\int \frac{8 dx}{x^2(5x-7)}$
14. $\int \frac{6 dx}{3x^2+18x+27}$
15. $\int \frac{(5x-3) dx}{3x^2+18x+24}$
16. $\int \frac{5x dx}{4+1x^2}$
17. $\int \frac{(x^2+9) dx}{7-6x^2}$
18. $\int \sqrt{x}(2-2x) dx$
19. $\int \frac{8 dx}{\sqrt{(3-6x)^3}}$
20. $\int \frac{3 dx}{\sqrt{6x^2-48x+96}}$
21. $\int \sqrt{9x^2-4} dx$
22. $\int (2x+1) \cos^2(3x-1) dx$
23. $\int 2 \cos^5(3x-5) dx$
24. $\int \frac{3 \cos x dx}{1+\cos(6x+5)}$
25. $\int \frac{8 dx}{3-6 \sin(9x+3)}$
26. $\int \frac{4 dx}{\sin^4(7x+7) \cos^2(7x+7)}$
27. $\int \frac{2 \sin(4x-7) dx}{\cos^3(4x-7)}$
28. $\int \cos(7x+5) \cos(3x-3) dx$
29. $\int \operatorname{ctg}^3(3x-1) dx$
30. $\int \arccos(6x-7) dx$
31. $\int e^{5x} \sin(9x-3) dx$
32. $\int \operatorname{sh}^2(6x+7) \operatorname{ch}(6x+7) dx$
33. $\int 9x^2 \ln(5x-6) dx$
34. $\int \frac{(6x^2-3x+3) dx}{4x^2+40x+96}$
35. $\int \frac{5 dx}{81-x^4}$
36. $\int \frac{(4x-5) dx}{(x^2+11x+30)(x^2-1x-30)}$
37. $\int \sqrt{3x^2-3x-126} dx$
38. $\int \frac{x^2-30x+108}{x^3+216} dx$
39. $\int \frac{(7-1x) dx}{2+\sqrt[3]{x}}$
40. $\int \frac{2x^2 dx}{(3x-6)^7}$

Вариант 21

1. $\int_3^8 \frac{x^4 dx}{1 + 5x}$
2. $\int_1^4 \frac{22dx}{(3 + 6x)(-6 + 5x)}$
3. $\int_3^9 \frac{6dx}{x(49 + x^2)}$
4. $\int_3^8 \frac{10 dx}{x\sqrt{6 + 8x}}$
5. $\int_2^6 \frac{x^2 dx}{\sqrt{49 - x^2}}$
6. $\int_5^6 \frac{18 dx}{100 - 25 \sin^2 x}$
7. $\int_4^6 \frac{10 dx}{\sin(\frac{3x + 5}{8}) \cdot \cos^2(\frac{3x + 5}{8})}$
8. $\int_3^5 \frac{2 \operatorname{tg}(\frac{2x + 3}{7}) dx}{\operatorname{tg}(\frac{2x + 3}{7}) + 1}$
9. $\int_2^6 15e^{-3x} \cos^2 x dx$
10. $\int_2^6 3 \cos(\ln(5x + 5)) dx$
11. $\int (7x + 3)(8x - 1) dx$
12. $\int \frac{4x dx}{(8x - 4)^3}$
13. $\int \frac{2x^2 dx}{(6x + 7)}$
14. $\int \frac{2 dx}{6x^2 + 36x + 54}$
15. $\int \frac{(3x - 5) dx}{6x^2 + 84x + 444}$
16. $\int \frac{4x dx}{3 + 9x^2}$
17. $\int \frac{4x^3 dx}{2 - 10x^2}$
18. $\int (8 + 6x)(5 + 5\sqrt{x^3}) dx$
19. $\int \frac{\sqrt{2 + 2x} dx}{2 dx}$
20. $\int \frac{2 dx}{\sqrt{3x^2 - 6x + 111}}$
21. $\int \frac{5x dx}{\sqrt{9 + 2x^2}}$
22. $\int 2x^2 \cos(6x - 6) dx$
23. $\int 2 \sin(6x + 3) \cos^2(6x + 3) dx$
24. $\int \frac{8 dx}{1 - \cos(2x + 5)}$
25. $\int \frac{3 dx}{2 - 7 \sin^2(3x + 1)}$
26. $\int \frac{9 dx}{\sin^3(5x - 3) \cos^3(5x - 3)}$
27. $\int \frac{9 \sin^2(6x + 4) dx}{\cos(6x + 4)}$
28. $\int \sin(5x + 1) \sin(4x - 2) dx$
29. $\int \operatorname{ctg}^4(6x - 3) dx$
30. $\int x \arcsin(8x - 7) dx$
31. $\int (3x - 5)7^{7x+3} dx$
32. $\int \operatorname{sh}(6x + 3) \operatorname{ch}^2(6x + 3) dx$
33. $\int \frac{\ln(4x + 4) dx}{(4x + 4)^2}$
34. $\int \frac{(3x^2 + 2x - 4) dx}{6x^2 + 60x + 126}$
35. $\int \frac{6 dx}{4x^2 - x^4}$
36. $\int \frac{(4x - 5) dx}{(x^2 + 11x + 30)(x^2 - 1x - 30)}$
37. $\int \sqrt{7x^2 - 98x + 595} dx$
38. $\int \frac{6x^2 - 27x - 75}{x^4 - 25x^2} dx$
39. $\int \frac{(5 - 1x) dx}{4 + \sqrt[3]{x}}$
40. $\int \frac{2x^2 dx}{(3x - 6)^7}$

Вариант 22

1. $\int_1^7 \frac{x dx}{(3 + 4x)^2}$.
2. $\int_3^5 \frac{21dx}{(3 + 3x)(-6 + 6x)}$.
3. $\int_3^6 \frac{17x^2 dx}{1 - x^2}$.
4. $\int_2^4 \frac{17x dx}{\sqrt{-2 + 5x}}$.
5. $\int_1^3 \frac{x^2 dx}{\sqrt{144 - x^2}}$.
6. $\int_2^3 \frac{31 dx}{49 - 25 \cos^2 x}$.
7. $\int_3^4 \frac{7 \sin(\frac{6x + 6}{8}) dx}{\sin(\frac{6x + 6}{8}) + \cos(\frac{6x + 6}{8})}$.
8. $\int_2^4 \frac{8 dx}{\operatorname{tg}(\frac{3x + 5}{3}) + 1}$.
9. $\int_2^4 17e^{1x} \cos^2 x dx$.
10. $\int_1^5 9 \sin(\ln(4x + 7)) dx$.
11. $\int (2x - 6)(5x + 1) dx$
12. $\int \frac{4x dx}{(5x - 4)}$
13. $\int \frac{2 dx}{x^2(3x + 1)}$
14. $\int \frac{2 dx}{2x^2 - 28x + 98}$
15. $\int \frac{(4x - 1) dx}{4x^2 + 32x + 164}$
16. $\int \frac{(x^2 + 3) dx}{8 + 4x^2}$
17. $\int \frac{(2x + 5) dx}{7 - 4x^2}$
18. $\int \sqrt{x}(4 - 2x) dx$
19. $\int \frac{4 dx}{\sqrt{(3 + 7x)^3}}$
20. $\int \frac{5 dx}{\sqrt{3x^2 - 12x + 159}}$
21. $\int \frac{3x dx}{\sqrt{4 + 11x^2}}$
22. $\int 2x^2 \cos(6x - 6) dx$
23. $\int 7 \cos^4(4x + 1) dx$
24. $\int \frac{8 dx}{\cos^3(7x - 1)}$
25. $\int 2 \sin(2x + 5) \sqrt{1 + 5 \sin^2(2x + 5)} dx$
26. $\int \frac{9 dx}{\sin^2(5x - 5) \cos^2(5x - 5)}$
27. $\int \frac{4 \cos(3x + 2) dx}{\sin^3(3x + 2)}$
28. $\int \cos(5x - 5) \cos(4x + 5) dx$
29. $\int \operatorname{ctg}^2(3x + 7) dx$
30. $\int x \arccos(8x - 3) dx$
31. $\int e^{8x} \sin(6x + 4) dx$
32. $\int \operatorname{sh}(4x + 6) \operatorname{ch}(4x + 6) dx$
33. $\int \frac{\ln(8x + 4) dx}{(8x + 4)^2}$
34. $\int \frac{(2x^2 - 3x + 6) dx}{4x^2 - 32x + 28}$
35. $\int \frac{(5x - 4) dx}{36x^2 - x^4}$
36. $\int \frac{(2x + 3) dx}{(x^2 - 1x - 20)(x^2 + 2x - 8)}$
37. $\int \sqrt{-4x^2 - 48x - 108} dx$
38. $\int \frac{2x^2 + 18x - 30}{x^4 - 18x^2 + 81} dx$
39. $\int \frac{(8 - 5x) dx}{4 + \sqrt{x}}$
40. $\int \frac{2x dx}{(8x - 5)^8}$

Вариант 23

1. $\int_2^6 \frac{x dx}{(4 - 5x)^3}$.
2. $\int_2^8 \frac{15 dx}{(3 + 3x)(3 + 7x)}$.
3. $\int_3^8 \frac{14x^2 dx}{4 - x^2}$.
4. $\int_3^5 \frac{13 dx}{\sqrt{1 + 5x}\sqrt{14 + 4x}}$.
5. $\int_3^6 \frac{21 dx}{(x^2 - 4)^{3/2}}$.
6. $\int_5^6 \frac{28 dx}{64 - 9 \cos^2 x}$.
7. $\int_6^7 \frac{11 dx}{\sin^2(\frac{4x + 2}{7}) \cdot \cos(\frac{4x + 2}{7})}$.
8. $\int_5^6 \frac{3 dx}{1 + \operatorname{ctg}(\frac{4x + 3}{8})}$.
9. $\int_0^3 20e^{-4x} \cos^2 x dx$.
10. $\int_3^6 9 \cos(\ln(6x + 3)) dx$.
11. $\int x(7x - 2)(4x - 5) dx$
12. $\int \frac{4 dx}{(8x + 7)^2}$
13. $\int \frac{5 dx}{x(4x + 1)}$
14. $\int \frac{7 dx}{3x^2 - 15x + 18}$
15. $\int \frac{(2x - 2) dx}{4x^2 - 56x + 232}$
16. $\int \frac{(6x - 2) dx}{8 + 1x^2}$
17. $\int \frac{8x^2 dx}{6 - 7x^2}$
18. $\int \sqrt{x^3}(8 - 3\sqrt{x}) dx$
19. $\int \frac{\sqrt{3x + 3} dx}{7 dx}$
20. $\int \frac{7 dx}{x\sqrt{1160x^2 + 280x + 3}}$
21. $\int \frac{9x dx}{\sqrt{5x^2 - 8}}$
22. $\int 8x^2 \cos(5x + 6) dx$
23. $\int 2 \sin(9x + 3) \cos^3(9x + 3) dx$
24. $\int \frac{6x dx}{1 + \sin(4x + 6)}$
25. $\int \frac{8 dx}{8 + 6 \cos(9x + 4)}$
26. $\int \frac{8 dx}{\sin^2(2x - 3) \cos^2(2x - 3)}$
27. $\int \frac{8 \sin^3(5x + 1) dx}{\cos(5x + 1)}$
28. $\int \sin(7x - 7) \cos(6x - 6) dx$
29. $\int \operatorname{ctg}^2(4x + 2) dx$
30. $\int \operatorname{arctg}(8x + 4) dx$
31. $\int e^{7x} \sin^2(4x - 1) dx$
32. $\int \operatorname{sh}(4x - 5) \operatorname{ch}^2(4x - 5) dx$
33. $\int 9 \ln(8x - 6) dx$
34. $\int \frac{(6x^2 - 3x + 3) dx}{4x^2 + 40x + 96}$
35. $\int \frac{(8x + 4) dx}{36x^2 + x^4}$
36. $\int \frac{(2x - 5) dx}{(x^2 + 2x - 8)(x^2 + 5x + 4)}$
37. $\int \sqrt{3x^2 + 18x + 135} dx$
38. $\int \frac{8x^2 - 17x + 7}{x^4 - 8x^3} dx$
39. $\int \frac{5x^{7/2} + 1x^{2/3} + 4}{\sqrt{x}} dx$
40. $\int 6x^2(2x + 6)^{10} dx$

Вариант 24

1. $\int_1^7 \frac{x^3 dx}{7 + 7x}$.
2. $\int_1^3 \frac{10dx}{x^2(6 - 3x)}$.
3. $\int_3^6 \frac{8dx}{x(16 + x^2)}$.
4. $\int_3^8 \frac{9dx}{(1 + 36x)\sqrt{x^3}}$.
5. $\int_3^7 \frac{21 dx}{(x^2 - 1)^{3/2}}$.
6. $\int_7^8 \frac{21 dx}{25 - 4 \sin^2 x}$.
7. $\int_2^3 \frac{11 \cos(\frac{5x + 7}{10}) dx}{\sin(\frac{5x + 7}{10}) + \cos(\frac{5x + 7}{10})}$.
8. $\int_5^6 \frac{3 dx}{1 + \operatorname{ctg}(\frac{4x + 3}{8})}$.
9. $\int_0^1 18e^{-1x} \sin^2 x dx$.
10. $\int_2^6 5 \sin(\ln(5x + 6)) dx$.
11. $\int_2^2 x(3x + 2)(2x - 2) dx$
12. $\int \frac{5x dx}{(7x - 3)^2}$
13. $\int \frac{dx}{(6x + 5)(8x + 4)}$
14. $\int \frac{7 dx}{2x^2 + 2x - 4}$
15. $\int \frac{(2x + 1) dx}{7x^2 + 28x - 35}$
16. $\int \frac{5x^3 dx}{10 + 7x^2}$
17. $\int \frac{2x^2 dx}{6 - 4x^2}$
18. $\int \sqrt{x}(3 + 2x) dx$
19. $\int \sqrt{6x + 4} dx$
20. $\int \frac{7 dx}{x\sqrt{84x^2 + 49x + 3}}$
21. $\int \sqrt{3x^2 + 6} dx$
22. $\int (7x + 7) \cos(3x + 2) dx$
23. $\int 7 \cos^5(2x + 6) dx$
24. $\int \frac{3 dx}{\sin^3(2x - 3)}$
25. $\int 9 \sin(5x - 7) \sqrt{1 + 9 \cos^2(5x - 7)} dx$
26. $\int \frac{6 dx}{\sin(2x - 5) \cos(2x - 5)}$
27. $\int \frac{2 \sin(4x - 5) dx}{\cos^2(4x - 5)}$
28. $\int \cos(5x + 1) \cos(7x - 3) dx$
29. $\int \operatorname{tg}^3(2x - 6) dx$
30. $\int \arccos(7x + 6) dx$
31. $\int e^{2x} \cos^2(7x + 4) dx$
32. $\int x \operatorname{ch}(8x - 2) dx$
33. $\int 6 \ln^2(4x + 6) dx$
34. $\int \frac{(5x^2 + 4x + 5) dx}{3x^2 + 18x - 21}$
35. $\int \frac{4 dx}{25x^2 - x^4}$
36. $\int \frac{(4x - 6) dx}{(x^2 + 11x + 28)(x^2 + 9x + 20)}$
37. $\int \sqrt{-5x^2 - 20x + 25} dx$
38. $\int \frac{-1x^2 - 3x - 18}{x^3 + 216} dx$
39. $\int \frac{(3 + 1x) dx}{4 + \sqrt{x}}$
40. $\int \frac{7x^2 dx}{(4x + 4)^5}$

Вариант 25

1. $\int_3^7 \frac{x^2 dx}{(3+2x)^2}$.
2. $\int_2^5 \frac{22dx}{x^2(5+2x)}$.
3. $\int_3^5 \frac{10dx}{x^2(4+x^2)}$.
4. $\int_2^6 \frac{11x^2 dx}{\sqrt{-4+6x}}$.
5. $\int_5^{10} \frac{x^2 dx}{\sqrt{x^2-1}}$.
6. $\int_9^{10} \frac{24 dx}{36+64 \sin^2 x}$.
7. $\int_1^2 \frac{4 \sin(\frac{5x+7}{11}) dx}{\sin(\frac{5x+7}{11}) - \cos(\frac{5x+7}{11})}$.
8. $\int_3^4 \frac{8 dx}{1 + \operatorname{ctg}(\frac{4x+6}{6})}$.
9. $\int_2^5 \frac{5 dx}{5+9e^{-5x}}$.
10. $\int_3^5 7 \cos(\ln(3x+7)) dx$.
11. $\int x(5x+2)(8x+4) dx$
12. $\int \frac{8x dx}{(5x-3)^2}$
13. $\int \frac{dx}{(5x-6)(8x-6)}$
14. $\int \frac{2 dx}{5x^2-70x+245}$
15. $\int \frac{(6x+3) dx}{2x^2+6x+4}$
16. $\int \frac{(8x-5) dx}{7+6x^2}$
17. $\int \frac{4x^2 dx}{2-5x^2}$
18. $\int \sqrt{x}(4-2x) dx$
19. $\int \frac{9 dx}{\sqrt{2-3x}}$
20. $\int \frac{7 dx}{x\sqrt{-21856x^2-6720x+4}}$
21. $\int \frac{8x dx}{\sqrt{10-3x^2}}$
22. $\int (5x+1) \cos(3x-1) dx$
23. $\int 6 \sin^2(3x-5) \cos^2(3x-5) dx$
24. $\int \frac{2 dx}{\cos^3(8x-5)}$
25. $\int \frac{5 dx}{8+6 \sin^2(5x-5)}$
26. $\int \frac{2 dx}{\sin^2(6x-5) \cos^2(6x-5)}$
27. $\int \frac{8 \sin^3(7x-6) dx}{\cos(7x-6)}$
28. $\int \sin(3x-3) \sin(9x-6) dx$
29. $\int \operatorname{tg}^4(6x-2) dx$
30. $\int \operatorname{arctg}(6x-2) dx$
31. $\int e^{8x} \sin^2(2x-4) dx$
32. $\int x \operatorname{sh}(5x+3) dx$
33. $\int 7x^3 \ln(5x-7) dx$
34. $\int \frac{(2x^2+4x-6) dx}{7x^2-70x+175}$
35. $\int \frac{7 dx}{8-x^3}$
36. $\int \frac{(2x-4) dx}{(x^2+6x+5)(x^2-1x-30)}$
37. $\int \sqrt{7x^2-84x+259} dx$
38. $\int \frac{4x^2+1x-6}{x^4+9x^2} dx$
39. $\int \frac{6x^{3/2}-2x^{4/3}+5}{\sqrt{x}} dx$
40. $\int 7x(2x-7)^6 dx$

Вариант 26

1. $\int_1^3 \frac{x^2 dx}{(4+5x)^2}$.

2. $\int_3^7 \frac{10dx}{x(4+2x)}$.

3. $\int_2^8 \frac{6dx}{x(49+x^2)}$.

4. $\int_3^5 \frac{9\sqrt{x} dx}{16-9x}$.

5. $\int_3^7 \frac{x^2 dx}{\sqrt{25+x^2}}$.

6. $\int_7^8 \frac{19 dx}{16-9\sin^2 x}$.

7. $\int_6^7 \frac{4 dx}{\sin^2(\frac{3x+6}{3}) \cdot \cos(\frac{3x+6}{3})}$.

8. $\int_2^4 \frac{2 dx}{\operatorname{tg}(\frac{3x+5}{9}) + 1}$.

9. $\int_1^2 14e^{-1x} \sin^2 x dx$.

10. $\int_1^7 5 \sin(\ln(4x+7)) dx$.

11. $\int_3^8 (8x-3)^2(7x+3)^2 dx$

12. $\int \frac{(3x+4) dx}{(8x+6)}$

13. $\int \frac{4x dx}{(2x-5)^2}$

14. $\int \frac{7 dx}{3x^2-15x+18}$

15. $\int \frac{(3x+6) dx}{5x^2-20x-105}$

16. $\int \frac{5x dx}{9+4x^2}$

17. $\int \frac{(5x^2+6) dx}{7-11x^2}$

18. $\int (7+7x)(3-6\sqrt{x^3}) dx$

19. $\int \frac{9 dx}{\sqrt{8+2x}}$

20. $\int \frac{6 dx}{x\sqrt{56x^2-42x+3}}$

21. $\int \sqrt{3x^2+6} dx$

22. $\int 5x^2 \sin(6x+2) dx$

23. $\int 2 \sin^4(6x-3) dx$

24. $\int \frac{4 dx}{\cos^3(2x-3)}$

25. $\int 8 \cos(7x-2) \sqrt{1-2\sin^2(7x-2)} dx$

26. $\int \frac{8 dx}{\sin^4(3x+7) \cos^2(3x+7)}$

27. $\int \frac{3 \cos^2(4x+6) dx}{\sin^4(4x+6)}$

28. $\int \sin(6x-6) \sin(4x-3) dx$

29. $\int \operatorname{ctg}^3(4x-6) dx$

30. $\int x \operatorname{arctg}(7x-6) dx$

31. $\int \frac{7 dx}{2+e^{3x}}$

32. $\int x \operatorname{ch}(4x+1) dx$

33. $\int 2x^2 \ln(8x-1) dx$

34. $\int \frac{(3x^2+1x+2) dx}{3x^2-24x+48}$

35. $\int \frac{5 dx}{16x^2-x^4}$

36. $\int \frac{(4x+5) dx}{(x^2-0x-36)(x^2-10x+24)}$

37. $\int \sqrt{4x^2-56x+296} dx$

38. $\int \frac{3x^2-34x+120}{x^3+125} dx$

39. $\int \frac{(4+4x) dx}{9+\sqrt[3]{x}}$

40. $\int \frac{9x dx}{(8x-3)^{10}}$

Вариант 27

1. $\int_3^8 \frac{x^4 dx}{1 + 10x}$
2. $\int_1^3 \frac{10dx}{x^2(6 - 3x)}$
3. $\int_3^9 \frac{x dx}{4x^2 + 5x + 4}$
4. $\int_2^4 \frac{15 dx}{x\sqrt{4 + 3x}}$
5. $\int_3^5 \frac{x^3 dx}{\sqrt{169 - x^2}}$
6. $\int_7^8 \frac{22 dx}{81 - 36 \sin^2 x}$
7. $\int_3^4 \frac{5 \sin(\frac{2x + 2}{9}) dx}{\sin(\frac{2x + 2}{9}) + \cos(\frac{2x + 2}{9})}$
8. $\int_{-1}^0 4 \operatorname{tg}^4(\frac{3x + 6}{6}) dx$
9. $\int_0^4 20e^{-1x} \sin^2 x dx$
10. $\int_1^7 x \ln(5 + 9x) dx$
11. $\int_1^1 (5x + 5)^n dx$
12. $\int \frac{2x dx}{(6x + 5)^2}$
13. $\int \frac{4 dx}{x(3x - 2)}$
14. $\int \frac{2 dx}{2x^2 + 28x + 98}$
15. $\int \frac{(6x - 2) dx}{6x^2 - 54x + 84}$
16. $\int \frac{7x^2 dx}{5 + 1x^2}$
17. $\int \frac{(x^2 + 6) dx}{4 - 3x^2}$
18. $\int (2 + 3\sqrt{x})(8 + 7\sqrt{x}) dx$
19. $\int \frac{2x dx}{\sqrt{7 - 6x}}$
20. $\int \frac{7 dx}{\sqrt{3x^2 - 18x + 102}}$
21. $\int \sqrt{7x^2 - 11} dx$
22. $\int (2x - 5) \sin(4x + 1) dx$
23. $\int 8 \sin^2(4x - 6) \cos(4x - 6) dx$
24. $\int \frac{6 \sin x dx}{1 + \sin(7x - 5)}$
25. $\int 3 \cos(6x + 4) \sqrt{1 + 7 \sin^2(6x + 4)} dx$
26. $\int \frac{6 dx}{\sin(2x - 5) \cos(2x - 5)}$
27. $\int \frac{3 \cos^2(4x + 6) dx}{\sin^4(4x + 6)}$
28. $\int \sin(6x - 6) \sin(4x - 3) dx$
29. $\int \operatorname{tg}^2(4x - 1) dx$
30. $\int x \arcsin(3x - 2) dx$
31. $\int e^{7x} \sin^2(9x - 6) dx$
32. $\int x \operatorname{sh}(5x - 2) dx$
33. $\int \frac{\ln(6x + 6) dx}{48x + 48}$
34. $\int \frac{(4x^2 - 1x - 4) dx}{7x^2 + 42x + 91}$
35. $\int \frac{7 dx}{36x^2 - x^4}$
36. $\int \frac{(3x + 7) dx}{(x^2 + 9x + 14)(x^2 + 6x + 8)}$
37. $\int \sqrt{3x^2 + 42x + 255} dx$
38. $\int \frac{3x^2 + 9x + 18}{x^3 + 216} dx$
39. $\int \frac{(7 - 1x) dx}{6 + \sqrt{x}}$
40. $\int 8x^2(7x - 2)^5 dx$

Вариант 28

1. $\int_2^6 \frac{x^2 dx}{(3+4x)^2}$.
2. $\int_2^5 \frac{22dx}{x^2(5+2x)}$.
3. $\int_3^6 \frac{6dx}{x(9+x^2)}$.
4. $\int_1^3 \frac{17 dx}{\sqrt{5+6x}\sqrt{10-3x}}$.
5. $\int_2^5 \frac{x^3 dx}{\sqrt{9+x^2}}$.
6. $\int_2^3 \frac{23 dx}{49+81 \cos^2 x}$.
7. $\int_6^8 \frac{11 \operatorname{tg}(\frac{5x+2}{10}) dx}{1+\cos(\frac{5x+2}{10})}$.
8. $\int_0^1 \frac{6 dx}{\operatorname{tg}(\frac{2x+7}{6})+1}$.
9. $\int_0^2 21e^{-3x} \sin^2 x dx$.
10. $\int_3^7 \frac{\ln(5+7x) dx}{x^2}$.
11. $\int (4x-1)^2(5x-3)^2 dx$
12. $\int \frac{(5x-1) dx}{(7x-2)}$
13. $\int \frac{2 dx}{x(8x-5)}$
14. $\int \frac{4 dx}{3x^2+18x+30}$
15. $\int \frac{(2x+1) dx}{2x^2-8x+6}$
16. $\int \frac{4x^3 dx}{3+10x^2}$
17. $\int \frac{(7x-6) dx}{2-6x^2}$

18. $\int \sqrt{x}(5-7\sqrt{x}) dx$
19. $\int (\sqrt{3x+3} + \sqrt{7x-4}) dx$
20. $\int \frac{7 dx}{x\sqrt{42x^2-84x+6}}$
21. $\int \frac{2x dx}{\sqrt{8+3x^2}}$
22. $\int (7x-7) \cos(5x-6) dx$
23. $\int (6x+4 \cos^2(5x+1)) dx$
24. $\int \frac{6 dx}{\cos(3x-2)}$
25. $\int \frac{9 dx}{7-6 \sin^2(6x-6)}$
26. $\int \frac{3 dx}{\sin^4(5x-7) \cos^2(5x-7)}$
27. $\int \frac{4 \cos^2(5x-5) dx}{\sin(5x-5)}$
28. $\int \sin(5x+2) \sin(2x+2) dx$
29. $\int \operatorname{ctg}^2(4x-6) dx$
30. $\int \arccos(7x+6) dx$
31. $\int e^{2x} \cos(6x+2) dx$
32. $\int \frac{x dx}{\operatorname{ch}^2(3x-4)}$
33. $\int 4 \ln^2(3x+5) dx$
34. $\int \frac{(2x^2-1x-6) dx}{7x^2-28x+28}$
35. $\int \frac{(4x+3) dx}{36x^2-x^4}$
36. $\int \frac{(2x-5) dx}{(x^2+2x-8)(x^2+5x+4)}$
37. $\int \sqrt{2x^2+4x+34} dx$
38. $\int \frac{5x^2-26x+0}{x^3-12x^2+36x} dx$
39. $\int \frac{4 dx}{x\sqrt{6+4x}}$
40. $\int 7x(8x+4)^6 dx$

Вариант 29

1. $\int_1^5 \frac{x^3 dx}{5 + 7x}$
2. $\int_1^7 \frac{21 dx}{x(3 + 5x)^2}$
3. $\int_3^5 \frac{x dx}{4x^2 + 2x + 4}$
4. $\int_3^9 \frac{12\sqrt{x} dx}{16 - 36x}$
5. $\int_1^4 \frac{x^2 dx}{\sqrt{144 - x^2}}$
6. $\int_5^6 \frac{20 dx}{9 - 4 \sin^2 x}$
7. $\int_1^2 \frac{8 dx}{\sin^2\left(\frac{2x + 6}{9}\right) \cdot \cos\left(\frac{2x + 6}{9}\right)}$
8. $\int_4^6 9 \operatorname{tg}^4\left(\frac{3x + 5}{8}\right) dx$
9. $\int_1^6 21e^{1x} \cos^2 x dx$
10. $\int_3^8 x \ln(4 + 7x) dx$
11. $\int (2x + 3)^n dx$
12. $\int \frac{5 dx}{(4x + 1)^2}$
13. $\int \frac{7x dx}{(5x + 4)^2}$
14. $\int \frac{6 dx}{7x^2 + 56x + 84}$
15. $\int \frac{(6x - 2) dx}{4x^2 + 16x + 52}$
16. $\int \frac{(6x - 2) dx}{8 + 1x^2}$
17. $\int \frac{8x^3 dx}{10 - 5x^2}$
18. $\int (7 - 2\sqrt{x})(6 - 1\sqrt{x^3}) dx$
19. $\int (\sqrt{6x - 7} + \sqrt{3x - 4}) dx$
20. $\int \frac{2 dx}{x\sqrt{42x^2 - 49x + 5}}$
21. $\int \frac{2x dx}{\sqrt{5 + 5x^2}}$
22. $\int (5x - 2) \cos(2x + 2) dx$
23. $\int 6 \sin^4(7x + 6) dx$
24. $\int \frac{6 \cos x dx}{1 - \cos(4x + 6)}$
25. $\int \frac{7 \sin(7x + 5) dx}{\sqrt{1 + 2 \sin^2(7x + 5)}}$
26. $\int \frac{9 dx}{\sin^2(8x + 4) \cos^2(8x + 4)}$
27. $\int \frac{5 \cos^2(4x - 2) dx}{\sin(4x - 2)}$
28. $\int \sin(8x - 4) \sin(2x + 1) dx$
29. $\int \operatorname{tg}^3(5x - 1) dx$
30. $\int x \operatorname{arctg}(4x - 4) dx$
31. $\int \frac{8 dx}{1 + e^{7x-3}}$
32. $\int \frac{x dx}{\operatorname{sh}^2(8x - 4)}$
33. $\int (7x - 6) \ln(5x + 3) dx$
34. $\int \frac{(5x^2 + 6x - 5) dx}{3x^2 - 6x - 72}$
35. $\int \frac{3 dx}{216 + x^3}$
36. $\int \frac{(4x - 3) dx}{(x^2 + 1x - 6)(x^2 - 2x - 15)}$
37. $\int \sqrt{2x^2 + 4x + 34} dx$
38. $\int \frac{2x^2 + 6x + 18}{x^4 + 9x^2} dx$
39. $\int \frac{9 dx}{3 + 4x^{8/6}}$
40. $\int 4x(5x + 2)^5 dx$

Вариант 30

1. $\int_3^7 \frac{x^4 dx}{1 + 11x}$.
2. $\int_2^8 \frac{16dx}{x(7 - 2x)^2}$.
3. $\int_2^5 \frac{x dx}{3x^2 - 2x - 3}$.
4. $\int_3^5 \frac{13 dx}{\sqrt{1 + 5x}\sqrt{14 + 4x}}$.
5. $\int_1^4 \frac{x^3 dx}{\sqrt{169 - x^2}}$.
6. $\int_7^8 \frac{25 dx}{100 - 25 \sin^2 x}$.
7. $\int_{-1}^1 \frac{11 \operatorname{ctg}\left(\frac{4x + 7}{11}\right) dx}{1 - \sin\left(\frac{4x + 7}{11}\right)}$.
8. $\int_0^1 \frac{6 dx}{1 - \operatorname{ctg}\left(\frac{4x + 5}{6}\right)}$.
9. $\int_2^8 \frac{9 dx}{3 + 5e^{-2x}}$.
10. $\int_2^5 \frac{\ln(4 + 3x) dx}{x^2}$.
11. $\int x(2x + 5)(3x - 4) dx$
12. $\int \frac{(9x - 2) dx}{(5x - 5)}$
13. $\int \frac{7x dx}{(3x - 5)^2}$
14. $\int \frac{6 dx}{2x^2 + 24x + 90}$
15. $\int \frac{(6x - 2) dx}{6x^2 - 54x + 84}$
16. $\int \frac{4x^3 dx}{8 + 5x^2}$
17. $\int \frac{(x^2 + 7) dx}{11 - 9x^2}$
18. $\int \sqrt{x^3}(4 - 3\sqrt{x}) dx$
19. $\int x \sqrt{(6 + 2x)^3} dx$
20. $\int \frac{3 dx}{\sqrt{6x^2 - 48x + 96}}$
21. $\int \sqrt{11x^2 + 4} dx$
22. $\int (6x + 3) \left(\sin(9x + 3) + \cos(9x + 3) \right) dx$
23. $\int 8 \sin^2(6x + 2) \cos(6x + 2) dx$
24. $\int \frac{3 dx}{1 - \sin(7x - 2)}$
25. $\int 6 \cos(2x + 3) \sqrt{1 - 8 \sin^2(2x + 3)} dx$
26. $\int \frac{\sin^3(7x - 2) \cos^3(7x - 2)}{5 \sin(8x - 3) dx}$
27. $\int \frac{5 \sin(8x - 3) dx}{\cos^2(8x - 3)}$
28. $\int \sin(8x - 6) \sin(7x + 6) dx$
29. $\int \operatorname{ctg}^4(6x - 3) dx$
30. $\int \arccos(5x - 2) dx$
31. $\int e^{7x} \sin(5x - 3) dx$
32. $\int \operatorname{sh}(8x + 7) \operatorname{ch}(8x + 7) dx$
33. $\int 3 \ln^2(8x - 1) dx$
34. $\int \frac{(3x^2 - 3x - 3) dx}{6x^2 - 18x - 60}$
35. $\int \frac{(7x - 3) dx}{1x^2 - x^4}$
36. $\int \frac{(5x + 2) dx}{(x^2 - 4x + 3)(x^2 + 5x - 6)}$
37. $\int \sqrt{4x^2 + 32x + 68} dx$
38. $\int \frac{2x^2 + 1x + 0}{x^4 - 36x^2} dx$
39. $\int \frac{5 dx}{x\sqrt{6 - 2x}}$
40. $\int \frac{8x dx}{(6x - 4)^8}$

Вариант 31

1. $\int_2^6 \frac{x^4 dx}{1 + 9x}$.
2. $\int_2^5 \frac{10dx}{x(4 - 6x)}$.
3. $\int_2^7 \frac{11dx}{x^2(16 + x^2)}$.
4. $\int_3^8 \frac{10dx}{(16 - 25x)\sqrt{x^3}}$.
5. $\int_2^4 \frac{19 dx}{(225 - x^2)^{3/2}}$.
6. $\int_7^8 \frac{34 dx}{36 - 9 \cos^2 x}$.
7. $\int_2^3 \frac{5 dx}{\sin(\frac{2x + 4}{8}) \cdot \cos^3(\frac{2x + 4}{8})}$.
8. $\int_0^1 \frac{6 dx}{1 - \operatorname{ctg}(\frac{4x + 5}{6})}$.
9. $\int_2^6 18e^{-1x} \cos^2 x dx$.
10. $\int_1^3 x^3 \ln(36 + x^2) dx$.
11. $\int_1^1 (4x - 1)^n dx$
12. $\int \frac{4x dx}{(8x - 7)^2}$
13. $\int \frac{9x^2 dx}{(8x + 4)}$
14. $\int \frac{4 dx}{4x^2 - 20x + 24}$
15. $\int \frac{(6x + 7) dx}{3x^2 + 6x + 3}$
16. $\int \frac{6x dx}{(4 + 7x^2)^2}$
17. $\int \frac{(x^2 + 4) dx}{6 - 3x^2}$
18. $\int \sqrt{x}(2 - 3x) dx$
19. $\int \frac{\sqrt{5 - 7x} dx}{5 dx}$
20. $\int \frac{5 dx}{x\sqrt{20x^2 + 25x + 6}}$
21. $\int \sqrt{7 + 8x^2} dx$
22. $\int (3x + 3) \left(\sin(9x + 5) + \cos(9x + 5) \right) dx$
23. $\int 3 \sin^2(4x - 6) \cos^2(4x - 6) dx$
24. $\int \frac{2 dx}{\cos^3(8x - 5)}$
25. $\int 2 \sin(5x + 2) \sqrt{1 + 9 \cos^2(5x + 2)} dx$
26. $\int \frac{6 dx}{\sin(2x - 5) \cos(2x - 5)}$
27. $\int \frac{5 \cos^3(2x - 6) dx}{\sin(2x - 6)}$
28. $\int \cos(7x + 5) \cos(3x - 3) dx$
29. $\int \operatorname{ctg}^4(2x - 4) dx$
30. $\int x \operatorname{arccotg}(3x - 1) dx$
31. $\int (2x^2 - 1x + 3)6^{x-3} dx$
32. $\int \frac{x dx}{\operatorname{sh}^2(8x + 3)}$
33. $\int 2 \ln(4x - 7) dx$
34. $\int \frac{(6x^2 + 3x + 2) dx}{5x^2 + 50x + 120}$
35. $\int \frac{(2x + 5) dx}{1x^2 + x^4}$
36. $\int \frac{(4x + 5) dx}{(x^2 - 0x - 36)(x^2 - 10x + 24)}$
37. $\int \sqrt{2x^2 + 28x + 170} dx$
38. $\int \frac{8x^2 - 17x + 7}{x^4 - 8x^3} dx$
39. $\int \frac{4x^{7/2} - 5x^{4/3} + 8}{\sqrt{x}} dx$
40. $\int 7x(8x + 2)^8 dx$

Вариант 32

1. $\int_3^8 \frac{x^4 dx}{1 + 5x}$.
2. $\int_3^8 \frac{13dx}{(7 + 7x)(-2 + 3x)}$.
3. $\int_3^6 \frac{x dx}{4x^2 - 6x + 6}$.
4. $\int_2^5 \frac{10x dx}{\sqrt{-1 + 3x}}$.
5. $\int_3^5 \frac{x^3 dx}{\sqrt{16 + x^2}}$.
6. $\int_2^3 \frac{25 dx}{25 - 16 \sin^2 x}$.
7. $\int_5^6 \frac{7 \operatorname{tg}(\frac{2x + 2}{9}) dx}{1 - \cos(\frac{2x + 2}{9})}$.
8. $\int_2^4 9 \operatorname{ctg}^3(\frac{2x + 2}{8}) dx$.
9. $\int_2^4 21e^{-4x} \sin^2 x dx$.
10. $\int_1^6 \frac{\ln(6 + 10x) dx}{x^2}$.
11. $\int x^n (5x + 6)^2 dx$
12. $\int \frac{(5x - 6) dx}{(7x + 4)}$
13. $\int \frac{4 dx}{x^2(8x - 3)}$
14. $\int \frac{6 dx}{3x^2 + 33x + 84}$
15. $\int \frac{(4x - 1) dx}{4x^2 + 32x + 164}$
16. $\int \frac{2x dx}{4 + 6x^2}$
17. $\int \frac{4x dx}{6 - 11x^2}$
18. $\int \sqrt{x^3(6 + 4x)} dx$
19. $\int \sqrt{3x + 5} dx$
20. $\int \frac{7 dx}{\sqrt{5x^2 - 5x - 60}}$
21. $\int \sqrt{7x^2 + 10} dx$
22. $\int (3x - 2) (\sin(4x - 1) + \cos(4x - 1)) dx$
23. $\int (4x + 3 \sin^2(2x + 5)) dx$
24. $\int \frac{2 \sin x dx}{1 + \sin(6x + 6)}$
25. $\int 6 \cos(2x + 3) \sqrt{1 - 8 \sin^2(2x + 3)} dx$
26. $\int \frac{7 dx}{\sin(5x + 4) \cos(5x + 4)}$
27. $\int \frac{3 \sin^3(2x + 3) dx}{\cos(2x + 3)}$
28. $\int \sin(5x + 1) \sin(4x - 2) dx$
29. $\int \operatorname{tg}^3(5x - 5) dx$
30. $\int \arcsin(2x + 4) dx$
31. $\int \frac{2 dx}{5 + e^{-5x}}$
32. $\int \frac{x dx}{\operatorname{sh}^2(6x + 1)}$
33. $\int 9 \ln^2(3x + 6) dx$
34. $\int \frac{(3x^2 - 7x + 1) dx}{7x^2 + 70x + 203}$
35. $\int \frac{(6x + 3) dx}{16 - x^4}$
36. $\int \frac{(3x - 6) dx}{(x^2 - 0x - 9)(x^2 - 1x - 12)}$
37. $\int \sqrt{-5x^2 - 20x + 25} dx$
38. $\int \frac{5x^2 - 4x - 13}{x^4 - 3x^3} dx$
39. $\int \frac{(4 - 7x) dx}{2 + \sqrt[3]{x}}$
40. $\int \frac{8x^2 dx}{(6x - 6)^{10}}$

Вариант 33

1. $\int_1^4 \frac{x^3 dx}{5 + 11x}$.
2. $\int_2^8 \frac{11dx}{x^2(3 + 5x)}$.
3. $\int_1^5 \frac{6dx}{x^2(4 + x^2)}$.
4. $\int_2^6 \frac{15 dx}{\sqrt{2 + 4x}\sqrt{15 - 2x}}$.
5. $\int_3^9 \frac{22 dx}{(121 - x^2)^{3/2}}$.
6. $\int_2^3 \frac{19 dx}{64 + 36 \cos^2 x}$.
7. $\int_4^5 \frac{6 \operatorname{ctg}(\frac{3x + 6}{7}) dx}{1 - \sin(\frac{3x + 6}{7})}$.
8. $\int_1^3 9 \operatorname{ctg}^3(\frac{2x + 6}{4}) dx$.
9. $\int_3^8 \frac{6 dx}{4 + 8e^{-3x}}$.
10. $\int_3^7 x \ln(5 + 7x) dx$.
11. $\int x(4x - 2)(8x + 6) dx$
12. $\int \frac{4x dx}{(5x + 1)}$
13. $\int \frac{8 dx}{x(2x - 7)}$
14. $\int \frac{7 dx}{2x^2 - 20x + 50}$
15. $\int \frac{(4x - 7) dx}{4x^2 - 24x + 36}$
16. $\int \frac{(x^2 + 7) dx}{8 + 10x^2}$
17. $\int \frac{4x^3 dx}{2 - 10x^2}$
18. $\int (6 + 3x)(6 - 4\sqrt{x^3}) dx$
19. $\int \sqrt{4 + 5x} dx$
20. $\int \frac{6 dx}{x\sqrt{-20x^2 + 15x + 5}}$
21. $\int \sqrt{7 + 8x^2} dx$
22. $\int 2x^2 \cos(6x - 6) dx$
23. $\int (6x + 4 \cos^2(5x + 1)) dx$
24. $\int \frac{4 dx}{1 - \sin(2x - 7)}$
25. $\int \frac{7 \sin(7x - 6) dx}{\sqrt{1 + 2 \sin^2(7x - 6)}}$
26. $\int \frac{5 dx}{\sin(6x + 3) \cos(6x + 3)}$
27. $\int \frac{7 \cos^2(5x + 4) dx}{\sin(5x + 4)}$
28. $\int \sin(2x - 6) \sin(4x - 5) dx$
29. $\int \operatorname{ctg}^4(4x + 4) dx$
30. $\int \operatorname{arctg}(8x + 2) dx$
31. $\int (2x - 4)e^{5x+4} dx$
32. $\int \operatorname{sh}(8x + 7) \operatorname{ch}(8x + 7) dx$
33. $\int \frac{\ln(4x - 4) dx}{20x - 20}$
34. $\int \frac{(5x^2 - 2x + 6) dx}{7x^2 - 70x + 238}$
35. $\int \frac{(4x - 6) dx}{25x^2 - x^4}$
36. $\int \frac{(2x - 6) dx}{(x^2 + 3x - 28)(x^2 + 2x - 35)}$
37. $\int \sqrt{-5x^2 - 70x - 165} dx$
38. $\int \frac{3x^2 - 17x - 9}{x^4 - 9x^2} dx$
39. $\int \frac{(5 - 1x) dx}{4 + \sqrt[3]{x}}$
40. $\int 2x(8x + 4)^5 dx$

Вариант 34

1. $\int_3^5 \frac{x^2 dx}{(5+6x)^2}$.
2. $\int_2^4 \frac{22dx}{(3+4x)(5+5x)}$.
3. $\int_2^4 \frac{9dx}{x(9+x^2)}$.
4. $\int_3^7 \frac{13x dx}{\sqrt{4+6x}}$.
5. $\int_1^5 \frac{20 dx}{(144-x^2)^{3/2}}$.
6. $\int_9^{10} \frac{31 dx}{16-4\cos^2 x}$.
7. $\int_2^3 \frac{11 dx}{\sin^3\left(\frac{3x+7}{8}\right) \cdot \cos\left(\frac{3x+7}{8}\right)}$.
8. $\int_4^5 \frac{6 \operatorname{tg}\left(\frac{3x+4}{5}\right) dx}{\operatorname{tg}\left(\frac{3x+4}{5}\right) - 1}$.
9. $\int_3^5 \frac{4 dx}{6+10e^{-3x}}$.
10. $\int_3^5 7 \cos(\ln(3x+7)) dx$.
11. $\int x^n (6x+2)^2 dx$
12. $\int \frac{4 dx}{(6x-1)^2}$
13. $\int \frac{4 dx}{x(6x+2)}$
14. $\int \frac{3 dx}{6x^2+48x+390}$
15. $\int \frac{(3x+6) dx}{5x^2-20x-105}$
16. $\int \frac{9x dx}{4+7x^2}$
17. $\int \frac{(x^2+9) dx}{7-6x^2}$
18. $\int (5+4x^{4/3}) dx$
19. $\int \frac{4 dx}{\sqrt{8+1x}}$
20. $\int \frac{2 dx}{\sqrt{7x^2-28x+56}}$
21. $\int \frac{5x dx}{\sqrt{8x^2+8}}$
22. $\int 5x^2 \sin(6x+2) dx$
23. $\int 8 \sin(9x+4) \cos^3(9x+4) dx$
24. $\int \frac{7 \sin x dx}{1+\sin(4x+4)}$
25. $\int 9 \sin(3x-5) \sqrt{1-5\sin^2(3x-5)} dx$
26. $\int \frac{9 dx}{\sin^2(4x-4) \cos(4x-4)}$
27. $\int \frac{4 \sin^2(3x-1) dx}{\cos(3x-1)}$
28. $\int \sin(5x-7) \cos(4x-2) dx$
29. $\int \operatorname{tg}^3(2x-4) dx$
30. $\int \operatorname{arctg}(8x-1) dx$
31. $\int (3x-5)7^{7x+3} dx$
32. $\int x \operatorname{sh}(6x-5) dx$
33. $\int 9 \ln(3x-5) dx$
34. $\int \frac{(4x^2-3x-0) dx}{5x^2-50x+125}$
35. $\int \frac{(6x+3) dx}{16-x^4}$
36. $\int \frac{(6x-1) dx}{(x^2+4x+3)(x^2-0x-9)}$
37. $\int \sqrt{6x^2+84x+390} dx$
38. $\int \frac{-2x^2+19x+0}{x^4-25x^2} dx$
39. $\int \frac{5 dx}{8-3x^{5/6}}$
40. $\int 3x(5x+5)^8 dx$

Вариант 35

1. $\int_1^7 \frac{x dx}{(3 + 4x)^2}$.
2. $\int_3^8 \frac{13 dx}{x(6 + 3x)^2}$.
3. $\int_1^3 \frac{8 dx}{x(9 + x^2)}$.
4. $\int_1^6 \frac{15 dx}{\sqrt{4 + 5x}\sqrt{10 + 2x}}$.
5. $\int_6^{11} \frac{x^2 dx}{\sqrt{x^2 - 9}}$.
6. $\int_9^{10} \frac{25 dx}{36 + 25 \cos^2 x}$.
7. $\int_{-1}^0 \frac{6 \operatorname{ctg}\left(\frac{4x + 7}{9}\right) dx}{1 - \sin\left(\frac{4x + 7}{9}\right)}$.
8. $\int_1^3 \frac{9 dx}{1 - \operatorname{ctg}\left(\frac{7x + 6}{4}\right)}$.
9. $\int_3^8 \frac{6 dx}{4 + 8e^{-3x}}$.
10. $\int_3^4 x^3 \ln(49 + x^2) dx$.
11. $\int (5x - 3)^2(3x + 2)^2 dx$
12. $\int \frac{2 dx}{(4x - 7)^3}$
13. $\int \frac{dx}{(2x - 2)(6x + 6)}$
14. $\int \frac{2 dx}{7x^2 + 7x - 14}$
15. $\int \frac{(2x + 4) dx}{6x^2 + 48x + 96}$
16. $\int \frac{6x^3 dx}{2 + 5x^2}$
17. $\int \frac{6x dx}{11 - 2x^2}$
18. $\int (3 - 6\sqrt{x})(4 + 4\sqrt{x}) dx$
19. $\int \frac{2x dx}{\sqrt{7 - 6x}}$
20. $\int \frac{6 dx}{x\sqrt{210x^2 + 77x + 7}}$
21. $\int \frac{4x dx}{\sqrt{7 - 6x^2}}$
22. $\int (2x + 4) \left(\sin(8x + 6) + \cos(8x + 6) \right) dx$
23. $\int 5 \sin^2(6x + 1) \cos^2(6x + 1) dx$
24. $\int \frac{9 dx}{\sin^3(8x + 7)}$
25. $\int 8 \cos(2x + 2) \sqrt{1 - 8 \sin^2(2x + 2)} dx$
26. $\int \frac{6 dx}{\sin^2(8x + 7) \cos^4(8x + 7)}$
27. $\int \frac{5 \cos^2(4x + 2) dx}{\sin(4x + 2)}$
28. $\int \sin(7x - 2) \sin(2x + 3) dx$
29. $\int \operatorname{ctg}^4(7x - 3) dx$
30. $\int x \arccos(4x + 5) dx$
31. $\int (7x^2 - 3x + 6)6^{x+2} dx$
32. $\int \frac{x dx}{\operatorname{sh}^2(8x + 3)}$
33. $\int 3x^3 \ln(5x - 6) dx$
34. $\int \frac{(4x^2 + 2x - 6) dx}{7x^2 - 56x + 455}$
35. $\int \frac{7 dx}{4x^2 - x^4}$
36. $\int \frac{(3x + 5) dx}{(x^2 + 8x + 12)(x^2 - 4x - 12)}$
37. $\int \sqrt{-7x^2 - 42x + 280} dx$
38. $\int \frac{3x^2 - 32x + 72}{x^3 - 12x^2 + 36x} dx$
39. $\int \frac{(4 - 5x) dx}{2 + \sqrt{x}}$
40. $\int \frac{2x dx}{(8x - 6)^7}$

Вариант 36

1. $\int_3^9 \frac{x^4 dx}{3 + 10x}$.
2. $\int_1^4 \frac{22dx}{(3 + 6x)(-6 + 5x)}$.
3. $\int_1^4 \frac{10dx}{x^2(4 + x^2)}$.
4. $\int_3^7 \frac{12 dx}{\sqrt{2 + 5x}\sqrt{6 + 2x}}$.
5. $\int_2^5 \frac{x^3 dx}{\sqrt{x^2 - 1}}$.
6. $\int_2^3 \frac{20 dx}{49 - 9 \sin^2 x}$.
7. $\int_5^7 \frac{6 \operatorname{tg}(\frac{3x + 3}{11}) dx}{1 + \cos(\frac{3x + 3}{11})}$.
8. $\int_1^2 \frac{5 \operatorname{tg}(\frac{2x + 2}{5}) dx}{\operatorname{tg}(\frac{2x + 2}{5}) + 1}$.
9. $\int_3^9 \frac{7 dx}{7 + 6e^{-3x}}$.
10. $\int_3^7 3 \cos(\ln(5x + 7)) dx$.
11. $\int (7x - 6)^2(9x - 3)^2 dx$
12. $\int \frac{7 dx}{(4x - 1)^3}$
13. $\int \frac{5 dx}{x(4x + 4)}$
14. $\int \frac{4 dx}{7x^2 - 56x + 112}$
15. $\int \frac{(4x + 5) dx}{6x^2 - 6x - 12}$
16. $\int \frac{5x^3 dx}{3 + 3x^2}$
17. $\int \frac{(6x^2 + 9) dx}{4 - 7x^2}$
18. $\int \sqrt{x}(3 + 4\sqrt{x}) dx$
19. $\int \frac{3 dx}{\sqrt{(5 + 4x)^3}}$
20. $\int \frac{4 dx}{\sqrt{3x^2 + 36x + 108}}$
21. $\int \frac{8x dx}{\sqrt{5x^2 - 8}}$
22. $\int 5x^2 \sin(7x + 4) dx$
23. $\int 4 \sin^5(6x + 4) dx$
24. $\int \frac{9 dx}{\sin(5x - 5)}$
25. $\int 2 \sin(2x + 5) \sqrt{1 + 5 \sin^2(2x + 5)} dx$
26. $\int \frac{5 dx}{\sin^4(4x - 7) \cos^2(4x - 7)}$
27. $\int \frac{3 \cos(4x - 6) dx}{\sin^2(4x - 6)}$
28. $\int \sin(2x + 3) \cos(8x - 6) dx$
29. $\int \operatorname{tg}^2(2x - 3) dx$
30. $\int \operatorname{arctg}(2x - 6) dx$
31. $\int e^{8x} \cos^2(9x + 2) dx$
32. $\int \frac{x dx}{\operatorname{sh}^2(5x + 3)}$
33. $\int (8x + 1) \ln(4x - 6) dx$
34. $\int \frac{(6x^2 - 1x + 2) dx}{7x^2 + 21x - 126}$
35. $\int \frac{9 dx}{343 - x^3}$
36. $\int \frac{(5x + 4) dx}{(x^2 - 0x - 9)(x^2 + 2x - 15)}$
37. $\int \sqrt{7x^2 + 84x + 259} dx$
38. $\int \frac{6x^2 + 22x + 115}{x^3 - 125} dx$
39. $\int \frac{2x^{3/2} + 1x^{5/3} + 4}{\sqrt{x}}$
40. $\int \frac{7x dx}{(5x - 3)^9}$

Вариант 37

1. $\int_3^6 \frac{x dx}{(3-4x)^3}$.
2. $\int_1^3 \frac{13dx}{x^2(7-2x)}$.
3. $\int_1^5 \frac{6dx}{x^2(4+x^2)}$.
4. $\int_1^7 \frac{14\sqrt{x} dx}{1-25x}$.
5. $\int_5^8 \frac{x^2 dx}{\sqrt{x^2-1}}$.
6. $\int_2^3 \frac{29 dx}{121-36 \cos^2 x}$.
7. $\int_0^1 \frac{7 \operatorname{ctg}(\frac{6x+5}{11}) dx}{1-\sin(\frac{6x+5}{11})}$.
8. $\int_0^1 2 \operatorname{ctg}^3(\frac{4x+4}{6}) dx$.
9. $\int_3^8 \frac{8 dx}{7+5e^{-3x}}$.
10. $\int_2^8 \frac{\ln(5+10x) dx}{x^2}$.
11. $\int (8x-1)^n dx$
12. $\int \frac{4 dx}{(8x-4)^3}$
13. $\int \frac{3x dx}{(4x-1)^2}$
14. $\int \frac{4 dx}{7x^2+42x+63}$
15. $\int \frac{(5x-5) dx}{5x^2-20x+100}$
16. $\int \frac{(x^2+6) dx}{7+10x^2}$
17. $\int \frac{3x^3 dx}{2-4x^2}$
18. $\int (4-2x)^{8/7} dx$
19. $\int \frac{3 dx}{\sqrt{2+3x}}$
20. $\int \frac{3 dx}{x\sqrt{-294x^2+84x+3}}$
21. $\int \sqrt{11x^2+3} dx$
22. $\int (4x+7) \cos^2(3x-6) dx$
23. $\int 3 \sin^3(9x+1) \cos(9x+1) dx$
24. $\int \frac{4 dx}{\sin(5x+7)}$
25. $\int 6 \sin(8x+3) \sqrt{1-5 \sin^2(8x+3)} dx$
26. $\int \frac{7 dx}{\sin^2(2x-3) \cos(2x-3)}$
27. $\int \frac{6 \cos(7x+7) dx}{\sin^2(7x+7)}$
28. $\int \cos(2x+2) \cos(6x+2) dx$
29. $\int \operatorname{tg}^2(7x+3) dx$
30. $\int \operatorname{arctg}(4x-4) dx$
31. $\int \frac{7 dx}{2+e^{3x}}$
32. $\int x \operatorname{sh}(8x-2) dx$
33. $\int (8x+4) \ln(3x-5) dx$
34. $\int \frac{(3x^2+5x-7) dx}{4x^2-12x+8}$
35. $\int \frac{6 dx}{16-x^4}$
36. $\int \frac{(2x-1) dx}{(x^2-9x+18)(x^2-3x-18)}$
37. $\int \sqrt{7x^2+7x-140} dx$
38. $\int \frac{x^2+1x+125}{x^4-625} dx$
39. $\int \frac{7x^{3/2}+1x^{4/3}+9}{\sqrt{x}}$
40. $\int \frac{8x dx}{(6x-5)^6}$

Вариант 38

1. $\int_2^7 \frac{x dx}{(4 + 5x)^2}$.
2. $\int_1^6 \frac{21 dx}{x(7 - 2x)^2}$.
3. $\int_1^5 \frac{6 dx}{x^2(25 + x^2)}$.
4. $\int_1^3 \frac{15 dx}{\sqrt{2 + 6x}\sqrt{15 - 4x}}$.
5. $\int_2^6 \frac{15 dx}{(x^2 - 1)^{3/2}}$.
6. $\int_9^{10} \frac{21 dx}{100 + 9 \cos^2 x}$.
7. $\int_0^2 \frac{5 dx}{\sin(\frac{2x + 7}{9}) \cdot \cos^2(\frac{2x + 7}{9})}$.
8. $\int_3^4 \frac{9 \operatorname{tg}(\frac{2x + 4}{9}) dx}{\operatorname{tg}(\frac{2x + 4}{9}) - 1}$.
9. $\int_1^6 14e^{-1x} \cos^2 x dx$.
10. $\int_2^7 \frac{\ln(7 + 8x) dx}{x^2}$.
11. $\int (4x - 7)^2(7x - 5)^2 dx$
12. $\int \frac{8 dx}{(4x - 6)^3}$
13. $\int \frac{5 dx}{x(7x - 1)}$
14. $\int \frac{6 dx}{2x^2 - 8x + 10}$
15. $\int \frac{(5x - 1) dx}{4x^2 - 8x + 4}$
16. $\int \frac{(x^2 + 6) dx}{7 + 10x^2}$
17. $\int \frac{(4x - 4) dx}{7 - 11x^2}$
18. $\int (4 + 7\sqrt{x})(2 + 7\sqrt{x^3}) dx$
19. $\int \frac{3x dx}{\sqrt{4 - 6x}}$
20. $\int \frac{4 dx}{\sqrt{4x^2 + 16x + 16}}$
21. $\int \frac{8x dx}{\sqrt{5x^2 - 8}}$
22. $\int 5x^2 \sin(6x - 3) dx$
23. $\int 2 \cos^4(7x - 3) dx$
24. $\int \frac{3 dx}{\cos^3(4x - 5)}$
25. $\int \frac{5 dx}{8 + 6 \sin^2(5x - 5)}$
26. $\int \frac{9 dx}{\sin(6x - 2) \cos^2(6x - 2)}$
27. $\int \frac{3 \cos^2(4x + 6) dx}{\sin^4(4x + 6)}$
28. $\int \sin(5x + 1) \cos(6x - 1) dx$
29. $\int \operatorname{tg}^4(3x + 2) dx$
30. $\int \operatorname{arctg}(3x - 2) dx$
31. $\int \frac{2 dx}{5 + e^{-5x}}$
32. $\int x^2 \operatorname{ch}(3x + 2) dx$
33. $\int (6x - 1) \ln(2x - 7) dx$
34. $\int \frac{(2x^2 + 3x - 4) dx}{2x^2 - 12x + 90}$
35. $\int \frac{7 dx}{4x^2 + x^4}$
36. $\int \frac{(5x + 6) dx}{(x^2 - 4x + 3)(x^2 + 3x - 18)}$
37. $\int \sqrt{2x^2 - 28x + 116} dx$
38. $\int \frac{11x^2 + 2x + 20}{x^4 + 4x^2} dx$
39. $\int \frac{(4 + 1x) dx}{8 + \sqrt[3]{x}}$
40. $\int \frac{2x^2 dx}{(3x - 6)^7}$

Вариант 39

1. $\int_1^5 \frac{x^2 dx}{(3+6x)^2}$.
2. $\int_2^5 \frac{21 dx}{x^2(4+5x)}$.
3. $\int_1^5 \frac{x dx}{3x^2 - 2x + 6}$.
4. $\int_1^6 \frac{8 dx}{(9+16x)\sqrt{x^3}}$.
5. $\int_2^6 \frac{17 dx}{(x^2 - 1)^{3/2}}$.
6. $\int_7^8 \frac{18 dx}{81 + 25 \cos^2 x}$.
7. $\int_2^3 \frac{8 \sin(\frac{5x+3}{5}) dx}{\sin(\frac{5x+3}{5}) - \cos(\frac{5x+3}{5})}$.
8. $\int_6^7 \frac{4 dx}{\operatorname{tg}(\frac{4x+4}{9}) - 1}$.
9. $\int_0^3 15e^{-3x} \sin^2 x dx$.
10. $\int_1^4 4 \sin(\ln(3x+8)) dx$.
11. $\int_1^1 (8x-1)^n dx$
12. $\int \frac{8x dx}{(7x+4)^2}$
13. $\int \frac{5 dx}{x(4x+4)}$
14. $\int \frac{5 dx}{5x^2 - 15x - 50}$
15. $\int \frac{(5x-3) dx}{3x^2 - 30x + 75}$
16. $\int \frac{(8x+3) dx}{5+7x^2}$
17. $\int \frac{(3x+3) dx}{7-3x^2}$
18. $\int (2+4\sqrt{x})(7-2\sqrt{x^3}) dx$
19. $\int \sqrt{2+5x} dx$
20. $\int \frac{7 dx}{\sqrt{4x^2 - 40x + 96}}$
21. $\int \sqrt{2x^2 + 11} dx$
22. $\int 3x^2 \sin(6x-4) dx$
23. $\int 4 \sin^5(9x+5) dx$
24. $\int \frac{3 dx}{1 - \cos(5x-6)}$
25. $\int \frac{5 dx}{7 + 6 \sin(9x-1)}$
26. $\int \frac{9 dx}{\sin^2(8x-2) \cos^4(8x-2)}$
27. $\int \frac{3 \sin^3(7x+4) dx}{\cos(7x+4)}$
28. $\int \sin(5x-7) \cos(4x-2) dx$
29. $\int \operatorname{ctg}^3(2x-6) dx$
30. $\int \operatorname{arctg}(2x+7) dx$
31. $\int e^{5x} \sin(9x-1) dx$
32. $\int x \operatorname{sh}(5x-2) dx$
33. $\int 4x^3 \ln(6x+1) dx$
34. $\int \frac{(3x^2+1x-4) dx}{6x^2-72x+216}$
35. $\int \frac{9 dx}{1x^2-x^4}$
36. $\int \frac{(3x-5) dx}{(x^2-7x+10)(x^2-1x-20)}$
37. $\int \sqrt{4x^2-8x+40} dx$
38. $\int \frac{-1x^2-3x-18}{x^3+216} dx$
39. $\int \frac{(5-3x) dx}{7+\sqrt{x}}$
40. $\int 3x(8x+5)^6 dx$

Вариант 40

1. $\int_3^6 \frac{x dx}{(6-3x)^3}$.
2. $\int_1^6 \frac{18x dx}{(6+x)(5+x)}$.
3. $\int_2^4 \frac{x dx}{4x^2-4x-4}$.
4. $\int_3^7 \frac{17dx}{(1-16x)\sqrt{x^3}}$.
5. $\int_1^5 \frac{x^2 dx}{\sqrt{64-x^2}}$.
6. $\int_2^3 \frac{20 dx}{36-9\sin^2 x}$.
7. $\int_3^4 \frac{4 \cos(\frac{5x+2}{7}) dx}{\sin(\frac{5x+2}{7}) + \cos(\frac{5x+2}{7})}$.
8. $\int_3^4 \frac{7 dx}{\operatorname{tg}(\frac{2x+2}{3}) - 1}$.
9. $\int_0^1 14e^{-1x} \cos^2 x dx$.
10. $\int_4^4 x^3 \ln(36+x^2) dx$.
11. $\int_1^1 (8x-6)(5x+5) dx$
12. $\int \frac{(5x-6) dx}{(7x+4)}$
13. $\int \frac{dx}{(3x+4)(7x+4)}$
14. $\int \frac{7 dx}{3x^2-12x+60}$
15. $\int \frac{(4x-3) dx}{2x^2+10x+12}$
16. $\int \frac{2x dx}{(5+8x^2)^2}$
17. $\int \frac{6x dx}{8-7x^2}$
18. $\int \sqrt{x^3}(3+2x) dx$
19. $\int \sqrt{3x+5} dx$
20. $\int \frac{6 dx}{x\sqrt{210x^2+77x+7}}$
21. $\int \sqrt{10+4x^2} dx$
22. $\int 3x^2 \cos(9x-4) dx$
23. $\int 3 \sin^4(5x+1) dx$
24. $\int \frac{6 dx}{\sin(3x+1)}$
25. $\int 5 \cos(2x-6) \sqrt{1+4\sin^2(2x-6)} dx$
26. $\int \frac{9 dx}{\sin(8x+5) \cos(8x+5)}$
27. $\int \frac{5 \sin^3(7x+3) dx}{\cos(7x+3)}$
28. $\int \cos(8x-1) \cos(3x-5) dx$
29. $\int \operatorname{tg}^3(7x-5) dx$
30. $\int x \arcsin(8x-7) dx$
31. $\int e^{7x} \cos(3x+5) dx$
32. $\int \frac{x dx}{\operatorname{sh}^2(5x+4)}$
33. $\int 7x^2 \ln(6x+4) dx$
34. $\int \frac{(2x^2-7x+3) dx}{3x^2+30x+222}$
35. $\int \frac{(3x+4) dx}{1x^2-x^4}$
36. $\int \frac{(5x+7) dx}{(x^2+6x+5)(x^2-6x-7)}$
37. $\int \sqrt{2x^2+8x+6} dx$
38. $\int \frac{2x^2+0x+12}{x^4+4x^2} dx$
39. $\int \frac{(4+1x) dx}{8+\sqrt[3]{x}}$
40. $\int \frac{9x^2 dx}{(2x-5)^8}$

Вариант 41

1. $\int_3^9 \frac{x^4 dx}{4 + 5x}$.
2. $\int_2^8 \frac{12dx}{x^2(6 + 6x)}$.
3. $\int_3^6 \frac{17x^2 dx}{1 - x^2}$.
4. $\int_3^7 \frac{15x^2 dx}{\sqrt{-1 + 3x}}$.
5. $\int_2^4 \frac{19 dx}{(225 - x^2)^{3/2}}$.
6. $\int_2^3 \frac{19 dx}{25 - 4 \sin^2 x}$.
7. $\int_2^3 \frac{4 \cos(\frac{3x+7}{9}) dx}{\sin(\frac{3x+7}{9}) - \cos(\frac{3x+7}{9})}$.
8. $\int_{-1}^0 4 \operatorname{tg}^4(\frac{2x+7}{8}) dx$.
9. $\int_1^5 \frac{8 dx}{6 + 9e^{-3x}}$.
10. $\int_3^4 x^3 \ln(49 + x^2) dx$.
11. $\int x(8x + 7)(5x - 4) dx$
12. $\int \frac{6x dx}{(8x - 3)^2}$
13. $\int \frac{8x^2 dx}{(7x - 3)}$
14. $\int \frac{3 dx}{5x^2 - 5x - 150}$
15. $\int \frac{(3x + 7) dx}{3x^2 - 18x + 174}$
16. $\int \frac{7x^2 dx}{10 + 10x^2}$
17. $\int \frac{(x^2 + 9) dx}{7 - 6x^2}$
18. $\int \sqrt{x^3}(6 + 4x) dx$
19. $\int (\sqrt{5x + 1} + \sqrt{9x + 1}) dx$
20. $\int \frac{2 dx}{\sqrt{6x^2 + 30x + 24}}$
21. $\int \frac{2x dx}{\sqrt{6 + 3x^2}}$
22. $\int (4x + 3) \sin^2(6x + 5) dx$
23. $\int 8 \cos^4(9x - 2) dx$
24. $\int \frac{8 dx}{1 - \sin(6x + 1)}$
25. $\int 9 \cos(2x + 6) \sqrt{1 + 6 \sin^2(2x + 6)} dx$
26. $\int \frac{4 dx}{\sin^4(5x - 6) \cos^2(5x - 6)}$
27. $\int \frac{4 \sin^3(2x - 3) dx}{\cos(2x - 3)}$
28. $\int \sin(4x + 1) \sin(8x + 5) dx$
29. $\int \operatorname{ctg}^4(8x + 4) dx$
30. $\int \operatorname{arctg}(8x - 1) dx$
31. $\int (2x + 5)e^{6x+4} dx$
32. $\int \operatorname{sh}(8x - 6) \operatorname{ch}^2(8x - 6) dx$
33. $\int 4x^2 \ln(8x + 2) dx$
34. $\int \frac{(6x^2 - 1x + 2) dx}{7x^2 - 42x - 49}$
35. $\int \frac{(8x + 3) dx}{4x^2 + x^4}$
36. $\int \frac{(5x - 1) dx}{(x^2 - 6x - 7)(x^2 - 0x - 49)}$
37. $\int \sqrt{7x^2 + 84x + 259} dx$
38. $\int \frac{0x^2 + 21x - 56}{x^4 - 32x^2 + 256} dx$
39. $\int \frac{5 dx}{4 + 6x^{8/5}}$
40. $\int 7x(8x + 4)^6 dx$

Вариант 42

1. $\int_3^6 \frac{x^4 dx}{3 + 7x}$
2. $\int_2^8 \frac{14dx}{x(7 + 3x)}$
3. $\int_3^8 \frac{14x^2 dx}{4 - x^2}$
4. $\int_1^3 \frac{11dx}{(16 - 25x)\sqrt{x^3}}$
5. $\int_1^5 \frac{x^2 dx}{\sqrt{4 + x^2}}$
6. $\int_9^{10} \frac{32 dx}{64 - 4 \cos^2 x}$
7. $\int_6^7 \frac{10 \cos(\frac{2x + 2}{11}) dx}{\sin(\frac{2x + 2}{11}) - \cos(\frac{2x + 2}{11})}$
8. $\int_2^3 \frac{9 dx}{\operatorname{tg}(\frac{5x + 2}{8}) - 1}$
9. $\int_3^7 \frac{11 dx}{6 + 5e^{-6x}}$
10. $\int_4^6 \sin(\ln(5x + 6)) dx$
11. $\int_1^5 (6x + 5)^2(5x - 1)^2 dx$
12. $\int \frac{2 dx}{(7x + 6)^2}$
13. $\int \frac{4 dx}{x(5x - 7)}$
14. $\int \frac{4 dx}{7x^2 - 56x + 112}$
15. $\int \frac{(6x + 3) dx}{5x^2 - 20x + 65}$
16. $\int \frac{(x^2 + 6) dx}{7 + 10x^2}$
17. $\int \frac{2x dx}{3 - 6x^2}$
18. $\int (5 + 3x^{3/6}) dx$
19. $\int \frac{3 dx}{\sqrt{4 + 1x}}$
20. $\int \frac{6 dx}{\sqrt{5x^2 + 65x + 210}}$
21. $\int \sqrt{6 - 8x^2} dx$
22. $\int (2x - 1) \sin(6x - 5) dx$
23. $\int 7 \sin^3(8x + 6) dx$
24. $\int \frac{4 dx}{\sin(5x + 7)}$
25. $\int 8 \cos(2x + 2) \sqrt{1 - 8 \sin^2(2x + 2)} dx$
26. $\int \frac{8 dx}{\sin^4(4x + 3) \cos^2(4x + 3)}$
27. $\int \frac{7 \cos^2(2x + 3) dx}{\sin(2x + 3)}$
28. $\int \cos(5x - 7) \cos(4x + 5) dx$
29. $\int \operatorname{ctg}^2(6x - 3) dx$
30. $\int \operatorname{arctg}(8x + 1) dx$
31. $\int (2x^2 - 1x + 3)6^{x-3} dx$
32. $\int x \operatorname{ch}(5x - 3) dx$
33. $\int 2 \ln(4x - 7) dx$
34. $\int \frac{(3x^2 + 1x + 2) dx}{3x^2 - 24x + 48}$
35. $\int \frac{9 dx}{125 + x^3}$
36. $\int \frac{(6x - 7) dx}{(x^2 - 8x + 7)(x^2 + 4x - 5)}$
37. $\int \sqrt{2x^2 + 24x + 74} dx$
38. $\int \frac{15x^2 - 3x + 112}{x^4 - 256} dx$
39. $\int \frac{5 dx}{4 + 6x^{8/5}}$
40. $\int \frac{2x^2 dx}{(8x - 2)^6}$

Вариант 43

1. $\int_1^3 \frac{x dx}{(3 - 6x)^3}$.
2. $\int_3^6 \frac{16x dx}{(4 + x)(7 + x)}$.
3. $\int_3^8 \frac{x dx}{4x^2 - 6x - 6}$.
4. $\int_3^8 \frac{17x dx}{\sqrt{-1 + 6x}}$.
5. $\int_4^{10} \frac{x^3 dx}{\sqrt{x^2 - 1}}$.
6. $\int_5^6 \frac{23 dx}{81 - 36 \sin^2 x}$.
7. $\int_1^2 \frac{9 dx}{\sin(\frac{2x + 6}{4}) \cdot \cos^2(\frac{2x + 6}{4})}$.
8. $\int_5^7 \frac{8 dx}{1 - \operatorname{ctg}(\frac{3x + 7}{4})}$.
9. $\int_1^3 18e^{-2x} \cos^2 x dx$.
10. $\int_3^6 \frac{\ln(3 + 6x) dx}{x^2}$.
11. $\int (8x + 5)^n dx$
12. $\int \frac{3 dx}{(7x + 2)^2}$
13. $\int \frac{9 dx}{x^2(3x - 4)}$
14. $\int \frac{4 dx}{3x^2 - 21x + 36}$
15. $\int \frac{(3x - 6) dx}{4x^2 + 32x + 64}$
16. $\int \frac{(x^2 + 9) dx}{3 + 9x^2}$
17. $\int \frac{(3x^2 + 4) dx}{7 - 5x^2}$
18. $\int (7 + 7x)(3 - 6\sqrt{x^3}) dx$
19. $\int \frac{7 dx}{\sqrt{(2 - 2x)^3}}$
20. $\int \frac{5 dx}{\sqrt{7x^2 + 98x + 455}}$
21. $\int \sqrt{7x^2 + 2} dx$
22. $\int (4x + 7) \cos^2(3x - 6) dx$
23. $\int 4 \sin^4(5x - 2) dx$
24. $\int \frac{4 dx}{1 + \sin(7x + 4)}$
25. $\int 2 \sin(5x - 5) \sqrt{1 + 4 \cos^2(5x - 5)} dx$
26. $\int \frac{4 dx}{\sin^2(5x - 3) \cos(5x - 3)}$
27. $\int \frac{5 \sin^3(7x + 3) dx}{\cos(7x + 3)}$
28. $\int \sin(8x - 5) \sin(9x + 5) dx$
29. $\int \operatorname{tg}^2(2x - 3) dx$
30. $\int x \operatorname{arcctg}(2x - 2) dx$
31. $\int (2x^2 + 4x + 9) 8^{x-3} dx$
32. $\int \operatorname{sh}(7x - 2) \operatorname{ch}(7x - 2) dx$
33. $\int 2x^2 \ln(8x - 1) dx$
34. $\int \frac{(4x^2 + 2x - 1) dx}{5x^2 + 50x + 125}$
35. $\int \frac{(7x - 5) dx}{16 - x^4}$
36. $\int \frac{(4x + 5) dx}{(x^2 + 10x + 21)(x^2 - 4x - 21)}$
37. $\int \sqrt{2x^2 - 12x + 50} dx$
38. $\int \frac{3x^2 - 34x + 120}{x^3 + 125} dx$
39. $\int \frac{4 dx}{8 + 4x^{6/5}}$
40. $\int \frac{7x^2 dx}{(8x - 5)^5}$

Вариант 44

1. $\int_2^4 \frac{x dx}{(7+5x)^3}$.
2. $\int_2^8 \frac{16 dx}{x(7-2x)^2}$.
3. $\int_3^7 \frac{12x^2 dx}{4-x^2}$.
4. $\int_3^7 \frac{13x^2 dx}{\sqrt{1+3x}}$.
5. $\int_3^7 \frac{20 dx}{(196-x^2)^{3/2}}$.
6. $\int_7^8 \frac{20 dx}{100+36 \sin^2 x}$.
7. $\int_3^4 \frac{7 \cos(\frac{4x+3}{9}) dx}{\sin(\frac{4x+3}{9}) - \cos(\frac{4x+3}{9})}$.
8. $\int_0^1 \frac{9 dx}{\operatorname{tg}(\frac{2x+3}{7}) + 1}$.
9. $\int_3^5 \frac{4 dx}{6+10e^{-3x}}$.
10. $\int_3^9 \sin(\ln(7x+5)) dx$.
11. $\int_1^9 (3x+2)^2(9x+5)^2 dx$.
12. $\int \frac{(5x-1) dx}{(7x-2)}$.
13. $\int \frac{3x^2 dx}{(6x+7)}$.
14. $\int \frac{3 dx}{3x^2-24x+123}$.
15. $\int \frac{(4x-7) dx}{4x^2-8x+4}$.
16. $\int \frac{(x^2+5) dx}{6+5x^2}$.
17. $\int \frac{(8x-4) dx}{9-5x^2}$.
18. $\int \sqrt{x^3}(2+7x) dx$.
19. $\int (\sqrt{3x+3} + \sqrt{7x-4}) dx$.
20. $\int \frac{2 dx}{x\sqrt{1400x^2-560x+2}}$.
21. $\int \sqrt{10+7x^2} dx$.
22. $\int 8x^2 \cos(5x-5) dx$.
23. $\int 2 \sin(7x+4) \cos^2(7x+4) dx$.
24. $\int \frac{7 \sin x dx}{1+\sin(4x+4)}$.
25. $\int \frac{9 \sin(7x-7) dx}{\sqrt{1+9 \sin^2(7x-7)}}$.
26. $\int \frac{4 dx}{\sin^2(8x+1) \cos^2(8x+1)}$.
27. $\int \frac{4 \sin^2(3x-3) dx}{\cos(3x-3)}$.
28. $\int \sin(2x+1) \sin(8x+2) dx$.
29. $\int \operatorname{tg}^3(2x-4) dx$.
30. $\int \operatorname{arccctg}(4x+4) dx$.
31. $\int e^{8x} \sin(6x+4) dx$.
32. $\int x \operatorname{ch}(3x-1) dx$.
33. $\int 9x^2 \ln(6x-5) dx$.
34. $\int \frac{(3x^2+2x-0) dx}{7x^2+35x-42}$.
35. $\int \frac{(4x-1) dx}{9x^2-x^4}$.
36. $\int \frac{(4x+5) dx}{(x^2-6x+8)(x^2-9x+14)}$.
37. $\int \sqrt{-3x^2-30x-48} dx$.
38. $\int \frac{-1x^2+4x+25}{x^3-10x^2+25x} dx$.
39. $\int \frac{9 dx}{x\sqrt{8-6x}}$.
40. $\int 9x(3x-5)^{10} dx$.

Вариант 45

1. $\int_3^8 \frac{x dx}{(3 - 2x)^2}$.
2. $\int_2^8 \frac{15x dx}{(3 + x)(7 + x)}$.
3. $\int_2^5 \frac{11 dx}{x(36 + x^2)}$.
4. $\int_3^7 \frac{12 dx}{x\sqrt{3 + 8x}}$.
5. $\int_3^9 \frac{x^2 dx}{\sqrt{121 - x^2}}$.
6. $\int_2^3 \frac{22 dx}{9 + 64 \cos^2 x}$.
7. $\int_{-1}^0 \frac{11 \operatorname{ctg}(\frac{2x + 7}{10}) dx}{1 - \sin(\frac{2x + 7}{10})}$.
8. $\int_4^5 9 \operatorname{tg}^4(\frac{4x + 6}{6}) dx$.
9. $\int_0^2 19e^{-3x} \sin^2 x dx$.
10. $\int_3^7 x^3 \ln(25 + x^2) dx$.
11. $\int x^n (6x - 7)^2 dx$
12. $\int \frac{5 dx}{(4x + 1)^2}$
13. $\int \frac{3 dx}{x(7x - 5)}$
14. $\int \frac{2 dx}{4x^2 - 28x + 24}$
15. $\int \frac{(6x - 7) dx}{3x^2 + 9x - 54}$
16. $\int \frac{6x^3 dx}{2 + 5x^2}$
17. $\int \frac{4x dx}{(3 - 5x^2)^2}$
18. $\int (7 + 2x)^{9/7} dx$
19. $\int \frac{\sqrt{2x + 7} dx}{7 dx}$
20. $\int \frac{7 dx}{x\sqrt{-192x^2 + 96x + 4}}$
21. $\int \sqrt{10x^2 - 8} dx$
22. $\int 2x^2 \cos(7x + 4) dx$
23. $\int 2 \sin(7x + 4) \cos^2(7x + 4) dx$
24. $\int \frac{5 \sin x dx}{1 - \sin(2x + 3)}$
25. $\int 7 \sin(2x + 5) \sqrt{1 + 7 \cos^2(2x + 5)} dx$
26. $\int \frac{3 dx}{\sin^4(6x + 7) \cos^2(6x + 7)}$
27. $\int \frac{7 \sin(5x + 5) dx}{\cos^3(5x + 5)}$
28. $\int \sin(8x + 7) \cos(9x - 1) dx$
29. $\int \operatorname{tg}^2(2x + 2) dx$
30. $\int \arccos(7x + 6) dx$
31. $\int \frac{3 dx}{1 + e^{2x-4}}$
32. $\int x^2 \operatorname{ch}(2x + 7) dx$
33. $\int \frac{\ln(3x + 6) dx}{18x + 36}$
34. $\int \frac{(3x^2 + 4x - 2) dx}{5x^2 + 25x - 70}$
35. $\int \frac{6 dx}{4x^2 - x^4}$
36. $\int \frac{(4x + 6) dx}{(x^2 - 3x - 18)(x^2 - 0x - 36)}$
37. $\int \sqrt{3x^2 + 6x + 15} dx$
38. $\int \frac{x^2 - 3x - 27}{x^4 - 9x^2} dx$
39. $\int \frac{7 dx}{6 - 3x^{3/6}}$
40. $\int 4x^2(3x + 4)^9 dx$

Вариант 46

1. $\int_3^6 \frac{x dx}{(3-4x)^3}$.
2. $\int_2^5 \frac{17 dx}{x^2(5+5x)}$.
3. $\int_2^4 \frac{x dx}{3x^2-3x+6}$.
4. $\int_3^6 \frac{10 dx}{(9-4x)\sqrt{x^3}}$.
5. $\int_5^8 \frac{x^3 dx}{\sqrt{x^2-9}}$.
6. $\int_9^{10} \frac{19 dx}{81+64\sin^2 x}$.
7. $\int_6^7 \frac{10 \cos(\frac{2x+2}{11}) dx}{\sin(\frac{2x+2}{11}) - \cos(\frac{2x+2}{11})}$.
8. $\int_6^7 7 \operatorname{ctg}^3(\frac{6x+2}{8}) dx$.
9. $\int_2^5 \frac{9 dx}{3+9e^{-3x}}$.
10. $\int_4^4 x^3 \ln(9+x^2) dx$.
11. $\int_1^1 x^n(5x+6)^2 dx$
12. $\int \frac{(9x-3) dx}{(8x+6)}$
13. $\int \frac{5 dx}{x(4x+1)}$
14. $\int \frac{4 dx}{4x^2+24x+52}$
15. $\int \frac{(5x+1) dx}{4x^2+56x+340}$
16. $\int \frac{(x^2+6) dx}{7+10x^2}$
17. $\int \frac{5x dx}{(2-5x^2)^2}$
18. $\int (4+7\sqrt{x})(2+7\sqrt{x^3}) dx$
19. $\int (\sqrt{7x-4} + \sqrt{9x-5}) dx$
20. $\int \frac{6 dx}{x\sqrt{56x^2-42x+3}}$
21. $\int \frac{5x dx}{\sqrt{9+2x^2}}$
22. $\int (7x-7) \sin^2(8x+5) dx$
23. $\int 3 \sin^2(4x-6) \cos^2(4x-6) dx$
24. $\int \frac{5 \cos x dx}{1+\cos(7x-5)}$
25. $\int 2 \sin(2x+2) \sqrt{1+3\cos^2(2x+2)} dx$
26. $\int \frac{5 dx}{\sin^2(8x+7) \cos^4(8x+7)}$
27. $\int \frac{2 \cos^3(5x-4) dx}{\sin(5x-4)}$
28. $\int \sin(8x-6) \cos(6x-3) dx$
29. $\int \operatorname{ctg}^4(2x+6) dx$
30. $\int x \arccos(5x-3) dx$
31. $\int (4x+1) 5^{9x-5} dx$
32. $\int x \operatorname{ch}(7x-5) dx$
33. $\int 4x^2 \ln(8x-6) dx$
34. $\int \frac{(4x^2-3x-2) dx}{5x^2+30x+170}$
35. $\int \frac{(8x+4) dx}{36x^2+x^4}$
36. $\int \frac{(6x+1) dx}{(x^2-2x-15)(x^2-4x-5)}$
37. $\int \sqrt{-5x^2+50x-45} dx$
38. $\int \frac{6x^2+16x+33}{x^3-27} dx$
39. $\int \frac{2 dx}{x\sqrt{4-4x}}$
40. $\int 2x^2(3x-3)^{10} dx$

Вариант 47

1. $\int_3^5 \frac{x dx}{(4 + 3x)^2}$.
2. $\int_2^4 \frac{16x dx}{(3 + x)(6 + x)}$.
3. $\int_2^5 \frac{11dx}{x(36 + x^2)}$.
4. $\int_2^4 \frac{15x^2 dx}{\sqrt{-2 + 5x}}$.
5. $\int_1^4 \frac{x^3 dx}{\sqrt{4 + x^2}}$.
6. $\int_5^6 \frac{20 dx}{36 + 81 \cos^2 x}$.
7. $\int_1^3 \frac{11 dx}{\sin^2(\frac{2x + 6}{9}) \cdot \cos(\frac{2x + 6}{9})}$.
8. $\int_4^5 \frac{7 \operatorname{tg}(\frac{2x + 4}{7}) dx}{\operatorname{tg}(\frac{2x + 4}{7}) - 1}$.
9. $\int_1^2 14e^{1x} \sin^2 x dx$.
10. $\int_2^4 3 \cos(\ln(6x + 8)) dx$.
11. $\int (2x + 2)(3x + 2) dx$
12. $\int \frac{9x dx}{(5x + 3)}$
13. $\int \frac{dx}{(6x - 6)(5x + 5)}$
14. $\int \frac{5 dx}{7x^2 - 56x + 112}$
15. $\int \frac{(5x - 3) dx}{3x^2 + 18x + 24}$
16. $\int \frac{3x^3 dx}{2 + 6x^2}$
17. $\int \frac{8x^2 dx}{9 - 11x^2}$
18. $\int \frac{2 dx}{(3 - 2x)^{6/7}}$
19. $\int x \sqrt{3 + 3x} dx$
20. $\int \frac{7 dx}{\sqrt{6x^2 + 60x + 366}}$
21. $\int \frac{4x dx}{\sqrt{2x^2 - 10}}$
22. $\int (4x + 4) \cos^2(6x + 1) dx$
23. $\int 8 \sin^3(9x - 6) dx$
24. $\int \frac{2x dx}{1 - \sin(4x + 1)}$
25. $\int \frac{8 \sin(3x + 5) dx}{\sqrt{1 + 8 \sin^2(3x + 5)}}$
26. $\int \frac{7 dx}{\sin^2(5x - 4) \cos(5x - 4)}$
27. $\int \frac{7 \cos(5x + 6) dx}{\sin^2(5x + 6)}$
28. $\int \sin(3x + 6) \cos(6x - 4) dx$
29. $\int \operatorname{tg}^3(3x - 3) dx$
30. $\int \arcsin(4x + 7) dx$
31. $\int e^{7x} \sin(5x - 3) dx$
32. $\int \operatorname{sh}(8x - 6) \operatorname{ch}^2(8x - 6) dx$
33. $\int \frac{\ln(5x + 5) dx}{(5x + 5)^2}$
34. $\int \frac{(5x^2 - 7x - 2) dx}{5x^2 + 40x + 80}$
35. $\int \frac{(7x - 2) dx}{9x^2 - x^4}$
36. $\int \frac{(2x + 6) dx}{(x^2 - 1x - 42)(x^2 + 5x - 6)}$
37. $\int \sqrt{-3x^2 + 42x - 99} dx$
38. $\int \frac{x^2 + 27x - 44}{x^3 + 64} dx$
39. $\int \frac{4 dx}{8 + 4x^{6/5}}$
40. $\int \frac{8x dx}{(6x - 6)^6}$

Вариант 48

1. $\int_1^3 \frac{x^4 dx}{5 + 5x}$.
2. $\int_3^7 \frac{17x dx}{(5 + x)(6 + x)}$.
3. $\int_3^9 \frac{6dx}{x^2(25 + x^2)}$.
4. $\int_3^9 \frac{8 dx}{x\sqrt{3 + 7x}}$.
5. $\int_5^9 \frac{x^2 dx}{\sqrt{x^2 - 4}}$.
6. $\int_2^3 \frac{21 dx}{25 + 9 \cos^2 x}$.
7. $\int_{-3}^{-2} \frac{4 \sin(\frac{2x + 7}{5}) dx}{\sin(\frac{2x + 7}{5}) + \cos(\frac{2x + 7}{5})}$.
8. $\int_{-1}^0 \frac{6 dx}{1 - \operatorname{ctg}(\frac{2x + 5}{3})}$.
9. $\int_1^3 \frac{4 dx}{5 + 4e^{-2x}}$.
10. $\int_3^6 x \ln(7 + 4x) dx$.
11. $\int (2x + 3)^n dx$
12. $\int \frac{(6x + 4) dx}{(3x - 7)}$
13. $\int \frac{dx}{(2x + 2)(6x - 2)}$
14. $\int \frac{3 dx}{5x^2 + 60x + 225}$
15. $\int \frac{(6x + 3) dx}{2x^2 + 6x + 4}$
16. $\int \frac{8x dx}{(9 + 7x^2)^2}$
17. $\int \frac{(2x^2 + 4) dx}{8 - 2x^2}$
18. $\int \frac{4 dx}{(3 - 3x)^{9/3}}$
19. $\int \frac{\sqrt{7 + 5x} dx}{5 dx}$
20. $\int \frac{5 dx}{x\sqrt{5854x^2 - 6174x + 2}}$
21. $\int \sqrt{8x^2 + 10} dx$
22. $\int (5x - 2) \cos(2x + 2) dx$
23. $\int 8 \sin(9x + 4) \cos^3(9x + 4) dx$
24. $\int \frac{3 dx}{\cos(4x + 6)}$
25. $\int \frac{7 dx}{8 - 7 \cos(7x - 1)}$
26. $\int \frac{2 dx}{\sin^3(7x - 4) \cos^3(7x - 4)}$
27. $\int \frac{5 \cos^2(4x + 2) dx}{\sin(4x + 2)}$
28. $\int \sin(5x + 7) \cos(3x - 1) dx$
29. $\int \operatorname{tg}^2(2x + 2) dx$
30. $\int \arcsin(3x - 7) dx$
31. $\int e^{4x} \cos^2(2x + 4) dx$
32. $\int \operatorname{sh}^2(7x - 3) \operatorname{ch}(7x - 3) dx$
33. $\int \frac{\ln(7x - 4) dx}{35x - 20}$
34. $\int \frac{(2x^2 - 2x - 3) dx}{4x^2 + 36x + 72}$
35. $\int \frac{6 dx}{4x^2 - x^4}$
36. $\int \frac{(3x + 4) dx}{(x^2 + 3x - 28)(x^2 - 5x + 4)}$
37. $\int \sqrt{2x^2 - 28x + 116} dx$
38. $\int \frac{2x^2 - 41x + 180}{x^3 - 12x^2 + 36x} dx$
39. $\int \frac{(5 - 2x) dx}{9 + \sqrt[3]{x}}$
40. $\int 5x(8x - 2)^9 dx$

Вариант 49

1. $\int_2^7 \frac{x dx}{(3 - 2x)^3}$.
2. $\int_3^8 \frac{20 dx}{x^2(5 - 5x)}$.
3. $\int_2^7 \frac{x dx}{2x^2 + 4x - 2}$.
4. $\int_1^3 \frac{16 dx}{\sqrt{3 + 3x}\sqrt{13 - 4x}}$.
5. $\int_2^5 \frac{x^3 dx}{\sqrt{x^2 - 1}}$.
6. $\int_5^6 \frac{19 dx}{16 + 25 \cos^2 x}$.
7. $\int_1^2 \frac{10 \cos(\frac{3x + 5}{7}) dx}{\sin(\frac{3x + 5}{7}) + \cos(\frac{3x + 5}{7})}$.
8. $\int_5^7 \frac{5 \operatorname{tg}(\frac{2x + 3}{9}) dx}{\operatorname{tg}(\frac{2x + 3}{9}) + 1}$.
9. $\int_1^2 14e^{-1x} \sin^2 x dx$.
10. $\int_3^3 x \ln(6 + 7x) dx$.
11. $\int_1^1 (2x + 2)(3x + 2) dx$.
12. $\int \frac{5 dx}{(6x - 6)^2}$.
13. $\int \frac{7x dx}{(5x + 4)^2}$.
14. $\int \frac{2 dx}{5x^2 - 50x + 205}$.
15. $\int \frac{(4x - 7) dx}{4x^2 - 24x + 36}$.
16. $\int \frac{(x^2 + 8) dx}{5 + 5x^2}$.
17. $\int \frac{(x^2 + 7) dx}{2 - 3x^2}$.
18. $\int (7 + 7\sqrt{x})(6 + 1\sqrt{x}) dx$.
19. $\int \frac{8 dx}{\sqrt{3 + 6x}}$.
20. $\int \frac{2 dx}{\sqrt{6x^2 + 84x + 300}}$.
21. $\int \sqrt{5x^2 + 10} dx$.
22. $\int (3x + 3) \sin^2(8x - 3) dx$.
23. $\int 4 \sin^5(6x + 4) dx$.
24. $\int \frac{7 dx}{\sin^3(8x - 5)}$.
25. $\int \frac{3 \sin(5x - 4) dx}{\sqrt{1 - 3 \sin^2(5x - 4)}}$.
26. $\int \frac{9 dx}{\sin(4x + 5) \cos(4x + 5)}$.
27. $\int \frac{9 \cos^3(8x - 6) dx}{\sin(8x - 6)}$.
28. $\int \sin(5x - 5) \cos(9x - 4) dx$.
29. $\int \operatorname{tg}^3(8x + 3) dx$.
30. $\int \operatorname{arctg}(8x - 6) dx$.
31. $\int e^{5x} \sin^2(8x + 2) dx$.
32. $\int \operatorname{sh}(3x - 1) \operatorname{ch}(3x - 1) dx$.
33. $\int 2 \ln^2(7x - 1) dx$.
34. $\int \frac{(4x^2 + 2x + 5) dx}{5x^2 - 50x + 370}$.
35. $\int \frac{5 dx}{8 + x^3}$.
36. $\int \frac{(5x + 3) dx}{(x^2 - 0x - 4)(x^2 + 3x - 10)}$.
37. $\int \sqrt{4x^2 - 16x + 12} dx$.
38. $\int \frac{5x^2 - 8x + 10}{x^4 - 2x^3} dx$.
39. $\int \frac{2 dx}{x\sqrt{5 + 4x}}$.
40. $\int 9x(2x - 6)^{11} dx$.

Вариант 50

1. $\int_3^9 \frac{x^4 dx}{4 + 5x}$.
2. $\int_2^8 \frac{15dx}{(7 + 5x)(-3 + 5x)}$.
3. $\int_1^7 \frac{x dx}{2x^2 + 3x + 6}$.
4. $\int_3^8 \frac{17x dx}{\sqrt{-1 + 6x}}$.
5. $\int_1^5 \frac{x^3 dx}{\sqrt{36 - x^2}}$.
6. $\int_9^{10} \frac{21 dx}{100 + 9 \cos^2 x}$.
7. $\int_1^2 \frac{7 dx}{\sin^3\left(\frac{3x + 7}{6}\right) \cdot \cos\left(\frac{3x + 7}{6}\right)}$.
8. $\int_3^4 \frac{8 dx}{1 + \operatorname{ctg}\left(\frac{4x + 6}{6}\right)}$.
9. $\int_0^1 20e^{-1x} \sin^2 x dx$.
10. $\int_1^4 x^3 \ln(9 + x^2) dx$.
11. $\int_1^1 (2x - 7)(4x - 1) dx$
12. $\int \frac{(3x + 3) dx}{(6x - 2)}$
13. $\int \frac{2x dx}{(3x + 4)^2}$
14. $\int \frac{6 dx}{5x^2 + 10x + 5}$
15. $\int \frac{(4x - 2) dx}{6x^2 - 36x + 54}$
16. $\int \frac{9x dx}{4 + 7x^2}$
17. $\int \frac{7x dx}{9 - 10x^2}$
18. $\int \frac{7 dx}{(2 + 2x)^{7/4}}$
19. $\int \frac{4x dx}{\sqrt{5 - 2x}}$
20. $\int \frac{3 dx}{x\sqrt{36x^2 + 42x + 2}}$
21. $\int \frac{5x dx}{\sqrt{9 - 10x^2}}$
22. $\int (4x - 6) \left(\sin(7x + 2) + \cos(7x + 2) \right) dx$
23. $\int 3 \sin^5(7x + 4) dx$
24. $\int \frac{3 \cos x dx}{1 - \cos(2x + 1)}$
25. $\int 5 \sin(4x + 6) \sqrt{1 + 9 \cos^2(4x + 6)} dx$
26. $\int \frac{7 dx}{\sin(4x - 1) \cos(4x - 1)}$
27. $\int \frac{8 \sin^2(6x - 1) dx}{\cos(6x - 1)}$
28. $\int \sin(6x - 2) \sin(5x + 3) dx$
29. $\int \operatorname{ctg}^3(3x - 1) dx$
30. $\int \arccos(7x - 5) dx$
31. $\int (8x^2 - 4x + 5)e^{x+5} dx$
32. $\int x^2 \operatorname{ch}(7x + 2) dx$
33. $\int (6x + 2) \ln(7x - 3) dx$
34. $\int \frac{(2x^2 - 2x - 0) dx}{6x^2 - 12x + 6}$
35. $\int \frac{(4x + 3) dx}{36x^2 - x^4}$
36. $\int \frac{(5x + 3) dx}{(x^2 - 3x - 10)(x^2 + 1x - 30)}$
37. $\int \sqrt{4x^2 - 8x + 40} dx$
38. $\int \frac{11x^2 - 47x - 3}{x^4 - 8x^3} dx$
39. $\int \frac{4x^{3/2} - 7x^{2/3} + 9}{\sqrt{x}}$
40. $\int \frac{6x^2 dx}{(7x + 7)^8}$

Вариант 51

1. $\int_2^5 \frac{x^2 dx}{(6 + 4x)^2}$.
2. $\int_2^4 \frac{14 dx}{x(3 - 6x)^2}$.
3. $\int_3^5 \frac{8 dx}{x(25 + x^2)}$.
4. $\int_3^7 \frac{7x^2 dx}{\sqrt{-4 + 4x}}$.
5. $\int_2^5 \frac{x^2 dx}{\sqrt{36 - x^2}}$.
6. $\int_5^6 \frac{20 dx}{16 + 81 \sin^2 x}$.
7. $\int_2^3 \frac{4 dx}{\sin^2(\frac{6x + 7}{9}) \cdot \cos(\frac{6x + 7}{9})}$.
8. $\int_{-2}^{-1} 9 \operatorname{tg}^4(\frac{2x + 6}{8}) dx$.
9. $\int_1^6 \frac{8 dx}{3 + 6e^{-4x}}$.
10. $\int_3^3 x \ln(3 + 4x) dx$.
11. $\int_1^1 x(5x - 1)(6x - 6) dx$.
12. $\int \frac{7x dx}{(3x + 4)^2}$.
13. $\int \frac{6 dx}{x(7x + 2)}$.
14. $\int \frac{6 dx}{5x^2 - 10x + 10}$.
15. $\int \frac{(4x + 3) dx}{5x^2 - 30x + 25}$.
16. $\int \frac{9x^3 dx}{6 + 5x^2}$.
17. $\int \frac{4x^2 dx}{2 - 5x^2}$.
18. $\int \sqrt{x}(4 - 2\sqrt{x}) dx$.
19. $\int \sqrt{2x + 7} dx$.
20. $\int \frac{4 dx}{\sqrt{3x^2 + 42x + 150}}$.
21. $\int \frac{6x dx}{\sqrt{8 + 10x^2}}$.
22. $\int (5x + 6) \sin^2(8x + 1) dx$.
23. $\int 2 \cos^3(3x + 4) dx$.
24. $\int \frac{7 dx}{\cos^3(6x - 2)}$.
25. $\int \frac{2 \sin(6x - 5) dx}{\sqrt{1 - 4 \sin^2(6x - 5)}}$.
26. $\int \frac{4 dx}{\sin^4(6x - 5) \cos^2(6x - 5)}$.
27. $\int \frac{8 \cos^3(5x - 4) dx}{\sin(5x - 4)}$.
28. $\int \sin(7x - 6) \cos(8x + 2) dx$.
29. $\int \operatorname{ctg}^4(3x - 7) dx$.
30. $\int \arcsin(3x - 7) dx$.
31. $\int (8x^2 - 3x - 6)e^{x-2} dx$.
32. $\int x^2 \operatorname{sh}(7x - 6) dx$.
33. $\int 4x^2 \ln(8x + 2) dx$.
34. $\int \frac{(3x^2 - 7x - 7) dx}{5x^2 - 40x + 80}$.
35. $\int \frac{(3x + 3) dx}{16x^2 - x^4}$.
36. $\int \frac{(3x + 5) dx}{(x^2 + 5x - 14)(x^2 + 8x + 7)}$.
37. $\int \sqrt{3x^2 + 33x + 90} dx$.
38. $\int \frac{5x^2 - 13x + 4}{x^3 - 4x^2 + 4x} dx$.
39. $\int \frac{(8 - 3x) dx}{7 + \sqrt[3]{x}}$.
40. $\int 7x^2(4x - 2)^{10} dx$.

Вариант 52

1. $\int_3^6 \frac{x^3 dx}{7 + 11x}$.
2. $\int_2^8 \frac{15x dx}{(3 + x)(7 + x)}$.
3. $\int_3^9 \frac{15x^2 dx}{1 - x^2}$.
4. $\int_3^9 \frac{8 dx}{x\sqrt{3 + 7x}}$.
5. $\int_2^6 \frac{x^3 dx}{\sqrt{16 + x^2}}$.
6. $\int_5^6 \frac{20 dx}{9 - 4 \sin^2 x}$.
7. $\int_2^3 \frac{8 \cos(\frac{3x + 6}{11}) dx}{\sin(\frac{3x + 6}{11}) - \cos(\frac{3x + 6}{11})}$.
8. $\int_2^3 \frac{7 \operatorname{tg}(\frac{2x + 3}{6}) dx}{\operatorname{tg}(\frac{2x + 3}{6}) + 1}$.
9. $\int_1^2 20e^{-2x} \sin^2 x dx$.
10. $\int_1^2 10 \cos(\ln(5x + 8)) dx$.
11. $\int_1^2 x(2x - 2)(9x - 4) dx$
12. $\int \frac{2x dx}{(4x + 2)^3}$
13. $\int \frac{3x^2 dx}{(6x + 7)}$
14. $\int \frac{2 dx}{7x^2 - 70x + 175}$
15. $\int \frac{(2x - 5) dx}{5x^2 + 10x + 25}$
16. $\int \frac{8x dx}{2 + 10x^2}$
17. $\int \frac{4x dx}{6 - 11x^2}$
18. $\int (6 + 5x)^{4/9} dx$
19. $\int \frac{8 dx}{\sqrt{(3 - 6x)^3}}$
20. $\int \frac{5 dx}{x\sqrt{-6240x^2 + 2400x + 7}}$
21. $\int \sqrt{5 + 9x^2} dx$
22. $\int 2x^2 \cos(6x - 6) dx$
23. $\int 3 \cos^4(7x - 3) dx$
24. $\int \frac{8 dx}{\cos(7x - 3)}$
25. $\int \frac{8 dx}{6 - 2 \sin^2(3x - 4)}$
26. $\int \frac{5 dx}{\sin(2x - 4) \cos^2(2x - 4)}$
27. $\int \frac{2 \cos^2(6x - 1) dx}{\sin^4(6x - 1)}$
28. $\int \cos(4x - 7) \cos(7x - 6) dx$
29. $\int \operatorname{ctg}^4(7x + 3) dx$
30. $\int \arccos(3x - 2) dx$
31. $\int (3x - 5)e^{5x+2} dx$
32. $\int \frac{x dx}{\operatorname{ch}^2(2x + 4)}$
33. $\int 2x^3 \ln(8x - 2) dx$
34. $\int \frac{(5x^2 - 4x + 7) dx}{3x^2 + 18x + 27}$
35. $\int \frac{(8x + 2) dx}{16 - x^4}$
36. $\int \frac{(4x - 3) dx}{(x^2 + 1x - 6)(x^2 - 2x - 15)}$
37. $\int \sqrt{7x^2 - 98x + 595} dx$
38. $\int \frac{x^2 + 15x + 2}{x^3 - 8} dx$
39. $\int \frac{4x^{7/2} - 5x^{4/3} + 8}{\sqrt{x}} dx$
40. $\int 5x(2x - 4)^6 dx$

Вариант 53

1. $\int_3^5 \frac{x dx}{(7+2x)^2}$.
2. $\int_1^3 \frac{17x dx}{(7+x)(2+x)}$.
3. $\int_2^7 \frac{11dx}{x^2(16+x^2)}$.
4. $\int_3^5 \frac{15 dx}{\sqrt{3+2x}\sqrt{11-2x}}$.
5. $\int_2^5 \frac{x^2 dx}{\sqrt{1+x^2}}$.
6. $\int_5^6 \frac{33 dx}{64-49 \cos^2 x}$.
7. $\int_2^3 \frac{5 dx}{\sin(\frac{2x+4}{8}) \cdot \cos^3(\frac{2x+4}{8})}$.
8. $\int_5^6 \frac{4 dx}{\operatorname{tg}(\frac{2x+3}{9}) + 1}$.
9. $\int_2^4 16e^{1x} \sin^2 x dx$.
10. $\int_1^7 \frac{\ln(6+5x) dx}{x^2}$.
11. $\int x(7x+3)(3x-3) dx$
12. $\int \frac{7x dx}{(3x-6)}$
13. $\int \frac{dx}{(7x-1)(6x-4)}$
14. $\int \frac{6 dx}{2x^2+28x+98}$
15. $\int \frac{(2x-4) dx}{7x^2+70x+427}$
16. $\int \frac{2x^2 dx}{5+5x^2}$
17. $\int \frac{(x^2+7) dx}{11-9x^2}$
18. $\int (3-6\sqrt{x})(4+4\sqrt{x}) dx$
19. $\int \sqrt{\frac{3x+5}{5x-5}} dx$
20. $\int \frac{6 dx}{\sqrt{6x^2-84x+510}}$
21. $\int \sqrt{11-9x^2} dx$
22. $\int (5x+6) \sin(9x-1) dx$
23. $\int 4 \cos^3(5x+4) dx$
24. $\int \frac{5 dx}{1+\cos(4x+3)}$
25. $\int 3 \cos(6x+4) \sqrt{1+7 \sin^2(6x+4)} dx$
26. $\int \frac{5 dx}{\sin^2(7x+7) \cos(7x+7)}$
27. $\int \frac{7 \sin^3(5x-6) dx}{\cos(5x-6)}$
28. $\int \sin(4x-7) \cos(3x+1) dx$
29. $\int \operatorname{tg}^2(4x-1) dx$
30. $\int \arcsin(3x-3) dx$
31. $\int e^{2x} \cos^2(7x+4) dx$
32. $\int \operatorname{sh}(5x+4) \operatorname{ch}(5x+4) dx$
33. $\int 9 \ln^2(6x+5) dx$
34. $\int \frac{(5x^2-2x-1) dx}{5x^2-15x-50}$
35. $\int \frac{4 dx}{36x^2-x^4}$
36. $\int \frac{(5x-3) dx}{(x^2-11x+28)(x^2-6x+8)}$
37. $\int \sqrt{-2x^2+28x-48} dx$
38. $\int \frac{9x^2-43x+45}{x^3-6x^2+9x} dx$
39. $\int \frac{(3+6x) dx}{9+\sqrt{x}}$
40. $\int \frac{9x^2 dx}{(7x-7)^7}$

Вариант 54

1. $\int_1^6 \frac{x^3 dx}{4 + 10x}$.
2. $\int_2^4 \frac{14dx}{x(3 - 6x)^2}$.
3. $\int_3^8 \frac{14x^2 dx}{4 - x^2}$.
4. $\int_1^7 \frac{15dx}{(4 - 9x)\sqrt{x^3}}$.
5. $\int_2^8 \frac{21 dx}{(1 + x^2)^{3/2}}$.
6. $\int_9^{10} \frac{35 dx}{25 - 4 \cos^2 x}$.
7. $\int_0^1 \frac{9 \operatorname{ctg}(\frac{7x+7}{11}) dx}{1 + \sin(\frac{7x+7}{11})}$.
8. $\int_3^5 \frac{9 \operatorname{tg}(\frac{4x+6}{3}) dx}{\operatorname{tg}(\frac{4x+6}{3}) + 1}$.
9. $\int_0^5 21e^{-4x} \cos^2 x dx$.
10. $\int_4^6 \sin(\ln(5x + 6)) dx$.
11. $\int_1^4 (4x - 1)^2(5x - 3)^2 dx$.
12. $\int \frac{2 dx}{(8x - 4)^2}$.
13. $\int \frac{dx}{(7x - 1)(6x - 4)}$.
14. $\int \frac{2 dx}{6x^2 - 54x + 120}$.
15. $\int \frac{(2x - 3) dx}{7x^2 + 70x + 238}$.
16. $\int \frac{4x^3 dx}{8 + 5x^2}$.
17. $\int \frac{(x^2 + 3) dx}{8 - 11x^2}$.
18. $\int (6 + 3x)(6 - 4\sqrt{x^3}) dx$.
19. $\int \frac{\sqrt{5x + 6} dx}{6}$.
20. $\int \frac{6 dx}{\sqrt{7x^2 - 7x - 210}}$.
21. $\int \frac{4x dx}{\sqrt{2x^2 - 10}}$.
22. $\int (4x + 1) \sin(7x - 4) dx$.
23. $\int (5x + 3 \sin^2(6x - 4)) dx$.
24. $\int \frac{8 dx}{\sin^3(6x - 1)}$.
25. $\int 2 \sin(2x + 2) \sqrt{1 + 3 \cos^2(2x + 2)} dx$.
26. $\int \frac{\sin^2(7x + 7) \cos(7x + 7)}{9 \sin(5x - 4) dx}$.
27. $\int \frac{9 \sin(5x - 4) dx}{\cos^2(5x - 4)}$.
28. $\int \sin(4x - 5) \sin(3x + 5) dx$.
29. $\int \operatorname{tg}^2(5x + 1) dx$.
30. $\int x \operatorname{arccctg}(6x + 6) dx$.
31. $\int \frac{7 dx}{3 + e^{-1x}}$.
32. $\int \operatorname{sh}^2(7x + 2) \operatorname{ch}(7x + 2) dx$.
33. $\int 6 \ln^2(4x + 6) dx$.
34. $\int \frac{(6x^2 - 3x + 3) dx}{4x^2 + 40x + 96}$.
35. $\int \frac{6 dx}{27 + x^3}$.
36. $\int \frac{(2x - 4) dx}{(x^2 + 6x + 5)(x^2 - 1x - 30)}$.
37. $\int \sqrt{-7x^2 - 42x + 280} dx$.
38. $\int \frac{2x^2 + 34x + 72}{x^3 - 64} dx$.
39. $\int \frac{(2 - 1x) dx}{5 + \sqrt{x}}$.
40. $\int \frac{8x dx}{(6x - 5)^6}$.

Вариант 55

1. $\int_3^5 \frac{x dx}{(4 + 3x)^2}$.
2. $\int_3^8 \frac{18 dx}{x(4 + 5x)}$.
3. $\int_1^3 \frac{11 dx}{x(49 + x^2)}$.
4. $\int_3^5 \frac{15x dx}{\sqrt{1 + 2x}}$.
5. $\int_3^5 \frac{22 dx}{(36 - x^2)^{3/2}}$.
6. $\int_2^3 \frac{22 dx}{9 + 64 \cos^2 x}$.
7. $\int_6^7 \frac{4 \sin(\frac{4x + 4}{9}) dx}{\sin(\frac{4x + 4}{9}) - \cos(\frac{4x + 4}{9})}$.
8. $\int_3^5 \frac{5 dx}{\operatorname{tg}(\frac{2x + 4}{8}) - 1}$.
9. $\int_3^9 \frac{10 dx}{5 + 7e^{-3x}}$.
10. $\int_1^5 10 \sin(\ln(6x + 3)) dx$.
11. $\int_1^1 (6x + 2)^2(9x + 2)^2 dx$
12. $\int \frac{4 dx}{(2x + 7)^3}$
13. $\int \frac{4x dx}{(2x + 3)^2}$
14. $\int \frac{7 dx}{7x^2 - 84x + 259}$
15. $\int \frac{(2x - 1) dx}{6x^2 - 84x + 510}$
16. $\int \frac{8x dx}{(7 + 9x^2)^2}$
17. $\int \frac{5x dx}{11 - 4x^2}$
18. $\int \sqrt{x}(4 - 2\sqrt{x}) dx$
19. $\int x \sqrt{(4 + 4x)^3} dx$
20. $\int \frac{7 dx}{x \sqrt{-17052x^2 - 4116x + 5}}$
21. $\int \frac{7x dx}{\sqrt{3x^2 - 5}}$
22. $\int (7x + 7) (\sin(4x - 3) + \cos(4x - 3)) dx$
23. $\int 7 \sin(4x - 3) \cos^2(4x - 3) dx$
24. $\int \frac{2 dx}{\cos^3(7x + 7)}$
25. $\int \frac{5 dx}{7 + 6 \sin(9x - 1)}$
26. $\int \frac{3 dx}{\sin^4(7x - 3) \cos^2(7x - 3)}$
27. $\int \frac{4 \cos^2(3x + 5) dx}{\sin^4(3x + 5)}$
28. $\int \sin(3x + 6) \cos(4x - 6) dx$
29. $\int \operatorname{tg}^3(2x - 4) dx$
30. $\int x \operatorname{arctg}(6x - 7) dx$
31. $\int \frac{3 dx}{1 + e^{2x-4}}$
32. $\int x \operatorname{ch}(4x + 1) dx$
33. $\int 7x^3 \ln(5x - 7) dx$
34. $\int \frac{(3x^2 - 4x + 6) dx}{5x^2 + 60x + 180}$
35. $\int \frac{7 dx}{1296 - x^4}$
36. $\int \frac{(2x - 7) dx}{(x^2 + 7x + 10)(x^2 - 0x - 4)}$
37. $\int \sqrt{-2x^2 - 20x - 0} dx$
38. $\int \frac{4x^2 - 6x - 60}{x^4 - 18x^2 + 81} dx$
39. $\int \frac{(4 - 2x) dx}{5 + \sqrt[3]{x}}$
40. $\int \frac{8x dx}{(6x - 5)^6}$

Вариант 56

1. $\int_1^7 \frac{x dx}{(7+3x)^3}$.
2. $\int_1^7 \frac{16 dx}{x^2(6-5x)}$.
3. $\int_1^5 \frac{6 dx}{x^2(4+x^2)}$.
4. $\int_3^7 \frac{13x^2 dx}{\sqrt{1+3x}}$.
5. $\int_3^7 \frac{15 dx}{(x^2-4)^{3/2}}$.
6. $\int_9^{10} \frac{35 dx}{49-4\cos^2 x}$.
7. $\int_2^3 \frac{8 \cos(\frac{3x+6}{11}) dx}{\sin(\frac{3x+6}{11}) - \cos(\frac{3x+6}{11})}$.
8. $\int_6^7 \frac{2 dx}{1 + \operatorname{ctg}(\frac{6x+6}{7})}$.
9. $\int_2^3 18e^{1x} \cos^2 x dx$.
10. $\int_3^5 10 \cos(\ln(7x+3)) dx$.
11. $\int (2x-3)(3x+5) dx$
12. $\int \frac{8 dx}{(7x-5)^3}$
13. $\int \frac{dx}{(3x+4)(7x+4)}$
14. $\int \frac{6 dx}{2x^2+28x+98}$
15. $\int \frac{(6x+4) dx}{3x^2-9x-84}$
16. $\int \frac{4x^2 dx}{3+8x^2}$
17. $\int \frac{(x^2+7) dx}{9-8x^2}$
18. $\int (6+3x)(6-4\sqrt{x^3}) dx$
19. $\int \sqrt{2+5x} dx$
20. $\int \frac{5 dx}{x\sqrt{-6240x^2+2400x+7}}$
21. $\int \sqrt{7-4x^2} dx$
22. $\int (4x+4) \sin^2(3x-3) dx$
23. $\int 2 \cos^3(3x+4) dx$
24. $\int \frac{9 \sin x dx}{1-\sin(8x-7)}$
25. $\int 8 \cos(6x+4) \sqrt{1-7\sin^2(6x+4)} dx$
26. $\int \frac{5 dx}{\sin^2(8x+7) \cos^4(8x+7)}$
27. $\int \frac{3 \cos^2(4x+6) dx}{\sin^4(4x+6)}$
28. $\int \sin(8x-2) \cos(5x-2) dx$
29. $\int \operatorname{tg}^3(5x+2) dx$
30. $\int x \arcsin(3x-2) dx$
31. $\int e^{2x} \sin(9x+2) dx$
32. $\int \operatorname{sh}^2(3x-4) \operatorname{ch}(3x-4) dx$
33. $\int 9x^3 \ln(8x-5) dx$
34. $\int \frac{(3x^2+1x+1) dx}{2x^2-24x+80}$
35. $\int \frac{3 dx}{216+x^3}$
36. $\int \frac{(4x+5) dx}{(x^2-0x-36)(x^2-10x+24)}$
37. $\int \sqrt{-2x^2+4x+6} dx$
38. $\int \frac{-2x^2+10x-12}{x^3-4x^2+4x} dx$
39. $\int \frac{(8-5x) dx}{4+\sqrt{x}}$
40. $\int 7x(4x+3)^9 dx$

Вариант 57

1. $\int_3^5 \frac{x^2 dx}{(7-3x)^2}$.
2. $\int_3^9 \frac{22dx}{x(3+6x)}$.
3. $\int_1^7 \frac{x dx}{3x^2+4x-4}$.
4. $\int_1^3 \frac{11 dx}{x\sqrt{3+2x}}$.
5. $\int_5^8 \frac{x^2 dx}{\sqrt{x^2-1}}$.
6. $\int_9^{10} \frac{20 dx}{49+16\cos^2 x}$.
7. $\int_6^7 \frac{11 dx}{\sin^2(\frac{4x+2}{7}) \cdot \cos(\frac{4x+2}{7})}$.
8. $\int_3^4 \frac{9 \operatorname{tg}(\frac{2x+4}{9}) dx}{\operatorname{tg}(\frac{2x+4}{9}) - 1}$.
9. $\int_0^1 20e^{-2x} \sin^2 x dx$.
10. $\int_2^4 3 \cos(\ln(6x+8)) dx$.
11. $\int (6x-5)(9x-3) dx$
12. $\int \frac{4x dx}{(3x+5)}$
13. $\int \frac{6x dx}{(3x-3)^2}$
14. $\int \frac{4 dx}{3x^2+18x+30}$
15. $\int \frac{(2x+6) dx}{6x^2+24x+24}$
16. $\int \frac{(x^2+2) dx}{7+8x^2}$
17. $\int \frac{2x^2 dx}{9-4x^2}$
18. $\int (5+3\sqrt{x})(9-6\sqrt{x^3}) dx$
19. $\int x\sqrt{5+4x} dx$
20. $\int \frac{7 dx}{x\sqrt{42x^2+48x+6}}$
21. $\int \sqrt{9-9x^2} dx$
22. $\int (6x-1) \sin^2(3x-4) dx$
23. $\int 7 \sin^3(2x+4) \cos(2x+4) dx$
24. $\int \frac{6 dx}{1-\cos(7x+5)}$
25. $\int \frac{8 \sin(4x+4) dx}{\sqrt{1+6\sin^2(4x+4)}}$
26. $\int \frac{2 dx}{\sin^2(3x+2) \cos^2(3x+2)}$
27. $\int \frac{3 \cos^3(8x+7) dx}{\sin(8x+7)}$
28. $\int \sin(8x-5) \sin(9x+5) dx$
29. $\int \operatorname{tg}^2(7x-5) dx$
30. $\int x \arcsin(8x-7) dx$
31. $\int (3x-2)2^{4x+2} dx$
32. $\int x \operatorname{sh}(6x-5) dx$
33. $\int 3 \ln^2(2x-5) dx$
34. $\int \frac{(5x^2+3x-0) dx}{6x^2-6x-120}$
35. $\int \frac{9 dx}{4x^2+x^4}$
36. $\int \frac{(4x-6) dx}{(x^2+5x-6)(x^2-3x+2)}$
37. $\int \sqrt{-2x^2-4x+30} dx$
38. $\int \frac{5x^2+12x+64}{x^3-64} dx$
39. $\int \frac{(6-3x) dx}{9+\sqrt{x}}$
40. $\int \frac{8x dx}{(6x-2)^8}$

Вариант 58

1. $\int_3^5 \frac{x dx}{(4 + 3x)^2}$.
2. $\int_1^4 \frac{22dx}{(4 + 4x)(-6 + 7x)}$.
3. $\int_2^6 \frac{x dx}{2x^2 + 2x + 4}$.
4. $\int_1^6 \frac{8dx}{(9 + 16x)\sqrt{x^3}}$.
5. $\int_3^6 \frac{x^3 dx}{\sqrt{81 - x^2}}$.
6. $\int_2^3 \frac{19 dx}{64 + 36 \cos^2 x}$.
7. $\int_3^4 \frac{8 \sin(\frac{3x + 5}{9}) dx}{\sin(\frac{3x + 5}{9}) - \cos(\frac{3x + 5}{9})}$.
8. $\int_1^3 5 \operatorname{tg}^3(\frac{2x + 3}{7}) dx$.
9. $\int_1^3 18e^{-2x} \cos^2 x dx$.
10. $\int_2^7 \frac{\ln(7 + 8x) dx}{x^2}$.
11. $\int (4x - 2)^n dx$
12. $\int \frac{4 dx}{(2x + 7)^3}$
13. $\int \frac{dx}{(6x - 6)(5x + 5)}$
14. $\int \frac{7 dx}{7x^2 + 84x + 504}$
15. $\int \frac{(4x - 6) dx}{6x^2 - 24x + 24}$
16. $\int \frac{5x dx}{9 + 4x^2}$
17. $\int \frac{7x dx}{3 - 5x^2}$
18. $\int (8 + 7x^{9/2}) dx$
19. $\int \frac{7 dx}{\sqrt{(2 - 7x)^3}}$
20. $\int \frac{4 dx}{x\sqrt{7072x^2 + 20160x + 3}}$
21. $\int \frac{7x dx}{\sqrt{2 - 7x^2}}$
22. $\int (5x + 6) \sin^2(8x + 1) dx$
23. $\int 4 \sin(9x + 4) \cos^2(9x + 4) dx$
24. $\int \frac{3x dx}{1 + \sin(5x - 7)}$
25. $\int 8 \cos(2x + 2) \sqrt{1 - 8 \sin^2(2x + 2)} dx$
26. $\int \frac{2 dx}{\sin(7x + 3) \cos^2(7x + 3)}$
27. $\int \frac{3 \cos^2(8x - 6) dx}{\sin^4(8x - 6)}$
28. $\int \sin(8x + 1) \sin(9x - 4) dx$
29. $\int \operatorname{tg}^2(7x + 7) dx$
30. $\int x \arccos(4x + 6) dx$
31. $\int e^{2x} \cos^2(4x + 2) dx$
32. $\int \frac{x dx}{\operatorname{sh}^2(6x - 6)}$
33. $\int \frac{\ln(3x - 7) dx}{(3x - 7)^2}$
34. $\int \frac{(6x^2 + 2x + 6) dx}{3x^2 + 36x + 108}$
35. $\int \frac{2 dx}{125 + x^3}$
36. $\int \frac{(2x - 4) dx}{(x^2 - 2x - 8)(x^2 - 0x - 16)}$
37. $\int \sqrt{-2x^2 + 4x + 6} dx$
38. $\int \frac{4x^2 + 1x - 50}{x^4 - 25x^2} dx$
39. $\int \frac{(5 - 3x) dx}{7 + \sqrt{x}}$
40. $\int \frac{2x dx}{(8x - 5)^8}$

Вариант 59

1. $\int_3^5 \frac{x dx}{(5 - 5x)^2}$.
2. $\int_1^6 \frac{18x dx}{(6 + x)(5 + x)}$.
3. $\int_3^6 \frac{x dx}{4x^2 - 6x + 6}$.
4. $\int_2^7 \frac{8\sqrt{x} dx}{16 - 25x}$.
5. $\int_3^7 \frac{20 dx}{(196 - x^2)^{3/2}}$.
6. $\int_7^8 \frac{20 dx}{16 - 9 \sin^2 x}$.
7. $\int_5^6 \frac{7 \operatorname{tg}(\frac{2x+2}{9}) dx}{1 - \cos(\frac{2x+2}{9})}$.
8. $\int_1^2 \frac{5 \operatorname{tg}(\frac{2x+2}{5}) dx}{\operatorname{tg}(\frac{2x+2}{5}) + 1}$.
9. $\int_2^4 20e^{-2x} \sin^2 x dx$.
10. $\int_3^7 3 \cos(\ln(5x + 7)) dx$.
11. $\int (6x + 5)(9x + 4) dx$
12. $\int \frac{(5x - 4) dx}{(6x - 2)}$
13. $\int \frac{3x^2 dx}{(4x + 2)}$
14. $\int \frac{3 dx}{6x^2 - 60x + 144}$
15. $\int \frac{(6x + 2) dx}{3x^2 + 18x + 102}$
16. $\int \frac{7x^2 dx}{6 + 3x^2}$
17. $\int \frac{(4x - 4) dx}{7 - 11x^2}$
18. $\int (7 - 4x^{6/3}) dx$
19. $\int x\sqrt{8 + 7x} dx$
20. $\int \frac{7 dx}{x\sqrt{1160x^2 + 280x + 3}}$
21. $\int \sqrt{2x^2 + 11} dx$
22. $\int 4x^2 \sin(2x - 3) dx$
23. $\int 2 \sin^3(4x - 1) \cos(4x - 1) dx$
24. $\int \frac{6 \sin x dx}{1 + \sin(4x - 7)}$
25. $\int \frac{3 dx}{6 - 6 \cos(5x + 2)}$
26. $\int \frac{9 dx}{\sin(8x + 5) \cos(8x + 5)}$
27. $\int \frac{4 \sin^3(8x - 1) dx}{\cos(8x - 1)}$
28. $\int \sin(7x + 7) \cos(9x + 3) dx$
29. $\int \operatorname{tg}^3(5x - 5) dx$
30. $\int \operatorname{arctg}(2x - 4) dx$
31. $\int e^{5x} \cos(6x - 6) dx$
32. $\int \operatorname{sh}(5x + 5) \operatorname{ch}(5x + 5) dx$
33. $\int 7x^3 \ln(3x - 6) dx$
34. $\int \frac{(3x^2 + 5x - 7) dx}{4x^2 - 12x + 8}$
35. $\int \frac{4 dx}{81 - x^4}$
36. $\int \frac{(6x + 4) dx}{(x^2 - 6x + 8)(x^2 - 9x + 20)}$
37. $\int \sqrt{-2x^2 - 4x + 96} dx$
38. $\int \frac{10x^2 - 7x - 18}{x^4 - 81} dx$
39. $\int \frac{9 dx}{5 - 5x^{5/2}}$
40. $\int \frac{8x dx}{(6x - 4)^8}$

Вариант 60

1. $\int_3^6 \frac{x dx}{(6-3x)^3}$.
2. $\int_1^3 \frac{17x dx}{(7+x)(2+x)}$.
3. $\int_2^6 \frac{11dx}{x(25+x^2)}$.
4. $\int_2^8 \frac{12\sqrt{x} dx}{4-36x}$.
5. $\int_3^8 \frac{x^3 dx}{\sqrt{225-x^2}}$.
6. $\int_2^3 \frac{25 dx}{16+36 \cos^2 x}$.
7. $\int_3^4 \frac{11 \operatorname{ctg}(\frac{2x+6}{6}) dx}{1-\sin(\frac{2x+6}{6})}$.
8. $\int_1^2 \frac{9 \operatorname{tg}(\frac{2x+7}{6}) dx}{\operatorname{tg}(\frac{2x+7}{6})+1}$.
9. $\int_0^3 20e^{-4x} \cos^2 x dx$.
10. $\int_1^4 x^3 \ln(9+x^2) dx$.
11. $\int_1^1 x(2x+4)(6x+1) dx$
12. $\int \frac{5x dx}{(6x-3)^3}$
13. $\int \frac{5 dx}{x(4x+4)}$
14. $\int \frac{7 dx}{3x^2+24x+48}$
15. $\int \frac{(2x-4) dx}{6x^2-60x+174}$
16. $\int \frac{9x dx}{4+7x^2}$
17. $\int \frac{4x dx}{(3-5x^2)^2}$
18. $\int \sqrt{x^3}(3-5\sqrt{x}) dx$
19. $\int \sqrt{\frac{6x-1}{3x+2}} dx$
20. $\int \frac{2 dx}{\sqrt{2x^2-18x+40}}$
21. $\int \sqrt{5x^2+10} dx$
22. $\int 4x^2 \cos(6x+2) dx$
23. $\int 7 \cos^5(8x+1) dx$
24. $\int \frac{4 dx}{\cos^3(2x-3)}$
25. $\int 6 \sin(8x+3) \sqrt{1-5 \sin^2(8x+3)} dx$
26. $\int \frac{9 dx}{\sin(4x+5) \cos(4x+5)}$
27. $\int \frac{9 \sin^2(6x+4) dx}{\cos(6x+4)}$
28. $\int \sin(6x+5) \sin(5x-1) dx$
29. $\int \operatorname{tg}^4(7x+1) dx$
30. $\int \arccos(4x-4) dx$
31. $\int (4x-1)e^{9x+6} dx$
32. $\int x \operatorname{ch}(5x-3) dx$
33. $\int \frac{\ln(3x+6) dx}{18x+36}$
34. $\int \frac{(3x^2+5x-7) dx}{4x^2-12x+8}$
35. $\int \frac{(8x+3) dx}{36x^2+x^4}$
36. $\int \frac{(6x+7) dx}{(x^2+11x+28)(x^2+1x-42)}$
37. $\int \sqrt{-5x^2-60x-100} dx$
38. $\int \frac{8x^2-35x+0}{x^4-6x^3} dx$
39. $\int \frac{4x^{7/2}-5x^{4/3}+8}{\sqrt{x}} dx$
40. $\int 5x^2(4x-2)^5 dx$

Вариант 61

1. $\int_1^5 \frac{x^3 dx}{4 + 8x}$.
2. $\int_2^8 \frac{21dx}{x(6 - 6x)}$.
3. $\int_2^8 \frac{6dx}{x(49 + x^2)}$.
4. $\int_2^7 \frac{10dx}{(4 - 36x)\sqrt{x^3}}$.
5. $\int_1^7 \frac{x^2 dx}{\sqrt{9 + x^2}}$.
6. $\int_9^{10} \frac{35 dx}{49 - 4 \cos^2 x}$.
7. $\int_0^2 \frac{10 \operatorname{tg}(\frac{2x+2}{6}) dx}{1 + \cos(\frac{2x+2}{6})}$.
8. $\int_2^3 7 \operatorname{ctg}^4(\frac{6x+5}{5}) dx$.
9. $\int_2^4 20e^{-2x} \sin^2 x dx$.
10. $\int_1^4 \frac{\ln(3 + 9x) dx}{x^2}$.
11. $\int x^n(5x - 2)^2 dx$
12. $\int \frac{2x dx}{(4x - 3)}$
13. $\int \frac{8 dx}{x(2x - 7)}$
14. $\int \frac{2 dx}{7x^2 - 14x + 7}$
15. $\int \frac{(5x + 4) dx}{7x^2 + 42x + 175}$
16. $\int \frac{6x^3 dx}{5 + 8x^2}$
17. $\int \frac{(6x^2 + 4) dx}{8 - 3x^2}$
18. $\int \frac{\sqrt{x}(5 - 3x) dx}{4 dx}$
19. $\int \frac{4 dx}{\sqrt{(3 + 7x)^3}}$
20. $\int \frac{7 dx}{\sqrt{5x^2 - 5x - 60}}$
21. $\int \sqrt{2 - 7x^2} dx$
22. $\int 2x^2 \cos(7x + 4) dx$
23. $\int 8 \sin^3(9x + 6) dx$
24. $\int \frac{7x dx}{1 - \sin(2x + 4)}$
25. $\int 4 \sin(6x + 5) \sqrt{1 + 3 \cos^2(6x + 5)} dx$
26. $\int \frac{8 dx}{\sin^4(4x + 3) \cos^2(4x + 3)}$
27. $\int \frac{5 \sin^2(7x + 3) dx}{\cos^4(7x + 3)}$
28. $\int \cos(8x - 1) \cos(3x - 5) dx$
29. $\int \operatorname{tg}^2(2x - 5) dx$
30. $\int \operatorname{arctg}(5x - 3) dx$
31. $\int (6x^2 - 3x + 2)e^{x+4} dx$
32. $\int \operatorname{sh}(6x + 6) \operatorname{ch}^2(6x + 6) dx$
33. $\int (8x + 3) \ln(5x - 3) dx$
34. $\int \frac{(6x^2 + 2x - 5) dx}{6x^2 + 48x + 96}$
35. $\int \frac{2 dx}{36x^2 + x^4}$
36. $\int \frac{(6x - 1) dx}{(x^2 + 4x + 3)(x^2 - 0x - 9)}$
37. $\int \sqrt{-5x^2 - 40x - 60} dx$
38. $\int \frac{-3x^2 + 7x - 44}{x^3 + 64} dx$
39. $\int \frac{(5 - 3x) dx}{7 + \sqrt{x}}$
40. $\int 9x^2(4x + 2)^7 dx$

Вариант 62

1. $\int_3^9 \frac{x^4 dx}{4 + 5x}$
2. $\int_1^7 \frac{14x dx}{(5 + x)(6 + x)}$
3. $\int_2^8 \frac{7dx}{x^2(1 + x^2)}$
4. $\int_2^5 \frac{16 dx}{\sqrt{5 + 2x}\sqrt{11 - 2x}}$
5. $\int_3^6 \frac{x^3 dx}{\sqrt{9 + x^2}}$
6. $\int_2^3 \frac{32 dx}{121 - 25 \cos^2 x}$
7. $\int_2^3 \frac{5 \operatorname{ctg}(\frac{7x + 7}{9}) dx}{1 + \sin(\frac{7x + 7}{9})}$
8. $\int_0^1 \frac{9 dx}{\operatorname{tg}(\frac{2x + 3}{7}) + 1}$
9. $\int_1^2 20e^{-2x} \sin^2 x dx$
10. $\int_2^5 x \ln(5 + 10x) dx$
11. $\int (4x + 1)(6x + 2) dx$
12. $\int \frac{5x dx}{(4x + 3)}$
13. $\int \frac{3 dx}{x(4x - 5)}$
14. $\int \frac{2 dx}{4x^2 - 28x + 24}$
15. $\int \frac{(2x - 1) dx}{7x^2 + 98x + 455}$
16. $\int \frac{(x^2 + 3) dx}{8 + 4x^2}$
17. $\int \frac{7x dx}{3 - 5x^2}$
18. $\int (5 + 7\sqrt{x})(8 + 1\sqrt{x}) dx$
19. $\int \sqrt{\frac{6 + 5x}{3 + 3x}} dx$
20. $\int \frac{2 dx}{\sqrt{3x^2 + 30x + 123}}$
21. $\int \frac{8x dx}{\sqrt{5x^2 - 8}}$
22. $\int (7x + 7) \cos(3x + 2) dx$
23. $\int 7 \sin^3(9x - 1) dx$
24. $\int \frac{6 dx}{\cos^3(5x + 5)}$
25. $\int \frac{7 \sin(4x - 6) dx}{\sqrt{1 + 6 \sin^2(4x - 6)}}$
26. $\int \frac{9 dx}{\sin(2x + 7) \cos^2(2x + 7)}$
27. $\int \frac{4 \sin^2(3x - 1) dx}{\cos(3x - 1)}$
28. $\int \cos(8x - 5) \cos(6x + 3) dx$
29. $\int \operatorname{ctg}^3(4x + 6) dx$
30. $\int x \operatorname{arctg}(5x + 2) dx$
31. $\int \frac{7 dx}{3 + e^{-1x}}$
32. $\int x \operatorname{sh}(8x - 3) dx$
33. $\int 9 \ln(3x + 6) dx$
34. $\int \frac{(6x^2 + 2x - 3) dx}{3x^2 - 6x + 3}$
35. $\int \frac{4 dx}{216 + x^3}$
36. $\int \frac{(5x - 3) dx}{(x^2 - 0x - 16)(x^2 - 1x - 12)}$
37. $\int \sqrt{-5x^2 - 40x - 60} dx$
38. $\int \frac{2x^2 - 9x + 19}{x^4 - 7x^3} dx$
39. $\int \frac{(2 - 7x) dx}{3 + \sqrt[3]{x}}$
40. $\int 8x(3x + 7)^7 dx$

Вариант 63

1. $\int_2^6 \frac{x dx}{(6 + 6x)^2}$.
2. $\int_2^6 \frac{18 dx}{x(7 - 3x)}$.
3. $\int_2^7 \frac{9 dx}{x^2(9 + x^2)}$.
4. $\int_2^5 \frac{15 dx}{\sqrt{4 + 6x}\sqrt{6 + 3x}}$.
5. $\int_2^7 \frac{15 dx}{(4 + x^2)^{3/2}}$.
6. $\int_2^3 \frac{21 dx}{25 + 9 \cos^2 x}$.
7. $\int_3^4 \frac{11 dx}{\sin^2(\frac{6x + 6}{7}) \cdot \cos(\frac{6x + 6}{7})}$.
8. $\int_5^7 \frac{4 dx}{\operatorname{tg}(\frac{2x + 2}{8}) - 1}$.
9. $\int_0^2 20e^{-2x} \cos^2 x dx$.
10. $\int_2^5 x \ln(5 + 10x) dx$.
11. $\int (3x + 2)^2(9x + 5)^2 dx$
12. $\int \frac{(6x + 4) dx}{(3x - 7)}$
13. $\int \frac{3x^2 dx}{(4x + 2)}$
14. $\int \frac{2 dx}{5x^2 + 50x + 105}$
15. $\int \frac{(4x + 1) dx}{4x^2 + 56x + 196}$
16. $\int \frac{(x^2 + 2) dx}{10 + 3x^2}$
17. $\int \frac{(6x^2 + 9) dx}{4 - 7x^2}$
18. $\int \sqrt{x^3}(4 + 6\sqrt{x}) dx$
19. $\int \sqrt{\frac{4 + 5x}{6 + 3x}} dx$
20. $\int \frac{6 dx}{x\sqrt{21220x^2 - 16144x + 3}}$
21. $\int \sqrt{4 + 9x^2} dx$
22. $\int (2x - 1) \sin(6x - 5) dx$
23. $\int 6 \sin^5(7x + 2) dx$
24. $\int \frac{9 \sin x dx}{1 + \sin(3x - 1)}$
25. $\int 4 \sin(8x + 7) \sqrt{1 - 2 \cos^2(8x + 7)} dx$
26. $\int \frac{6 dx}{\sin(2x - 5) \cos(2x - 5)}$
27. $\int \frac{3 \cos(8x - 4) dx}{\sin^3(8x - 4)}$
28. $\int \cos(5x + 5) \cos(4x + 6) dx$
29. $\int \operatorname{ctg}^4(2x + 6) dx$
30. $\int \arccos(6x - 2) dx$
31. $\int e^{3x} \sin^2(7x - 6) dx$
32. $\int x^2 \operatorname{sh}(5x - 4) dx$
33. $\int 7x^2 \ln(4x - 7) dx$
34. $\int \frac{(6x^2 - 6x + 4) dx}{3x^2 - 3x - 90}$
35. $\int \frac{4 dx}{9x^2 + x^4}$
36. $\int \frac{(2x - 4) dx}{(x^2 + 6x + 5)(x^2 - 1x - 30)}$
37. $\int \sqrt{5x^2 + 50x + 145} dx$
38. $\int \frac{4x^2 + 18x - 34}{x^4 - 6x^3} dx$
39. $\int \frac{8x^{3/2} + 5x^{5/3} + 3}{\sqrt{x}} dx$
40. $\int \frac{6x dx}{(2x - 5)^8}$

Вариант 64

1. $\int_1^4 \frac{x^4 dx}{3 + 7x}$.
2. $\int_2^6 \frac{13dx}{(7 + 6x)(-2 + 7x)}$.
3. $\int_2^7 \frac{11dx}{x^2(16 + x^2)}$.
4. $\int_2^6 \frac{15 dx}{\sqrt{2 + 4x}\sqrt{15 - 2x}}$.
5. $\int_3^6 \frac{15 dx}{(x^2 - 1)^{3/2}}$.
6. $\int_7^8 \frac{33 dx}{81 - 64 \cos^2 x}$.
7. $\int_3^4 \frac{7 \cos(\frac{4x + 3}{9}) dx}{\sin(\frac{4x + 3}{9}) - \cos(\frac{4x + 3}{9})}$.
8. $\int_5^6 \frac{3 dx}{\operatorname{tg}(\frac{3x + 3}{6}) - 1}$.
9. $\int_2^4 14e^{1x} \sin^2 x dx$.
10. $\int_3^7 5 \sin(\ln(4x + 7)) dx$.
11. $\int (4x - 4)^2(9x - 6)^2 dx$
12. $\int \frac{4 dx}{(7x + 3)^2}$
13. $\int \frac{4 dx}{x(5x - 3)}$
14. $\int \frac{2 dx}{5x^2 + 50x + 105}$
15. $\int \frac{(6x - 5) dx}{2x^2 + 24x + 72}$
16. $\int \frac{6x dx}{9 + 3x^2}$
17. $\int \frac{8x dx}{(4 - 9x^2)^2}$
18. $\int \sqrt{x^3}(6 - 5x) dx$
19. $\int \sqrt{(7 + 4x)^3} dx$
20. $\int \frac{4 dx}{x\sqrt{-27472x^2 - 19600x + 3}}$
21. $\int \sqrt{2x^2 - 11} dx$
22. $\int (7x - 4) \sin(5x - 3) dx$
23. $\int 4 \sin^4(7x + 5) dx$
24. $\int \frac{3 dx}{1 + \sin(7x - 4)}$
25. $\int 7 \sin(7x + 3) \sqrt{1 + 9 \sin^2(7x + 3)} dx$
26. $\int \frac{7 dx}{\sin^2(5x - 4) \cos^2(5x - 4)}$
27. $\int \frac{5 \sin(2x - 7) dx}{\cos^3(2x - 7)}$
28. $\int \cos(6x - 6) \cos(2x + 5) dx$
29. $\int \operatorname{tg}^3(3x - 3) dx$
30. $\int x \operatorname{arcctg}(7x + 6) dx$
31. $\int (3x + 3)5^{9x-6} dx$
32. $\int \frac{x dx}{\operatorname{sh}^2(7x - 2)}$
33. $\int 7x^2 \ln(4x - 7) dx$
34. $\int \frac{(3x^2 + 5x - 7) dx}{4x^2 - 12x + 8}$
35. $\int \frac{7 dx}{36x^2 - x^4}$
36. $\int \frac{(6x + 4) dx}{(x^2 - 8x + 7)(x^2 - 5x - 14)}$
37. $\int \sqrt{2x^2 + 4x + 34} dx$
38. $\int \frac{3x^2 + 15x + 28}{x^4 - 16} dx$
39. $\int \frac{9 dx}{3 + 1x^{4/5}}$
40. $\int 3x(6x + 3)^{10} dx$

Вариант 65

1. $\int_1^4 \frac{x^4 dx}{3 + 7x}$.
2. $\int_3^9 \frac{22dx}{x(3 + 6x)}$.
3. $\int_3^9 \frac{6dx}{x(49 + x^2)}$.
4. $\int_3^7 \frac{12 dx}{\sqrt{2 + 5x}\sqrt{6 + 2x}}$.
5. $\int_3^6 \frac{x^2 dx}{\sqrt{81 - x^2}}$.
6. $\int_5^6 \frac{23 dx}{16 + 64 \sin^2 x}$.
7. $\int_2^3 \frac{8 \cos(\frac{3x + 6}{11}) dx}{\sin(\frac{3x + 6}{11}) - \cos(\frac{3x + 6}{11})}$.
8. $\int_0^1 \frac{6 dx}{\operatorname{tg}(\frac{2x + 7}{6}) + 1}$.
9. $\int_2^4 17e^{1x} \cos^2 x dx$.
10. $\int_3^7 3 \cos(\ln(5x + 7)) dx$.
11. $\int x(4x - 2)(8x + 6) dx$
12. $\int \frac{9x dx}{(5x + 3)}$
13. $\int \frac{2x^2 dx}{(7x - 1)}$
14. $\int \frac{7 dx}{4x^2 - 4x - 80}$
15. $\int \frac{(2x - 4) dx}{7x^2 + 70x + 427}$
16. $\int \frac{8x^2 dx}{7 + 3x^2}$
17. $\int \frac{(4x - 4) dx}{10 - 2x^2}$
18. $\int (7 + 2x)^{9/7} dx$
19. $\int \sqrt{\frac{4 + 5x}{6 + 3x}} dx$
20. $\int \frac{3 dx}{x\sqrt{-294x^2 + 84x + 3}}$
21. $\int \frac{2x dx}{\sqrt{4x^2 - 7}}$
22. $\int (7x - 7) \sin^2(8x + 5) dx$
23. $\int 8 \sin(9x + 4) \cos^3(9x + 4) dx$
24. $\int \frac{8x dx}{1 + \sin(4x - 5)}$
25. $\int 4 \sin(6x - 2) \sqrt{1 + 7 \sin^2(6x - 2)} dx$
26. $\int \frac{2 dx}{\sin(4x - 2) \cos(4x - 2)}$
27. $\int \frac{7 \cos(5x + 6) dx}{\sin^2(5x + 6)}$
28. $\int \sin(7x + 6) \sin(6x + 5) dx$
29. $\int \operatorname{tg}^2(5x + 6) dx$
30. $\int \operatorname{arctg}(6x + 3) dx$
31. $\int (3x^2 - 7x + 6)e^{x+6} dx$
32. $\int \operatorname{sh}^2(6x + 7) \operatorname{ch}(6x + 7) dx$
33. $\int 2 \ln^2(4x + 7) dx$
34. $\int \frac{(2x^2 - 7x + 3) dx}{3x^2 + 30x + 222}$
35. $\int \frac{2 dx}{125 - x^3}$
36. $\int \frac{(3x + 5) dx}{(x^2 + 8x + 12)(x^2 - 4x - 12)}$
37. $\int \sqrt{-2x^2 + 4x + 96} dx$
38. $\int \frac{3x^2 - 32x + 72}{x^3 - 12x^2 + 36x} dx$
39. $\int \frac{(8 - 5x) dx}{4 + \sqrt{x}}$
40. $\int 7x^2(8x - 3)^6 dx$

Вариант 66

1. $\int_1^3 \frac{x^4 dx}{5 + 9x}$
2. $\int_2^8 \frac{18 dx}{x(7 + 3x)^2}$
3. $\int_2^5 \frac{10 dx}{x^2(9 + x^2)}$
4. $\int_1^7 \frac{15 dx}{(4 - 9x)\sqrt{x^3}}$
5. $\int_1^6 \frac{20 dx}{(49 - x^2)^{3/2}}$
6. $\int_9^{10} \frac{35 dx}{49 - 36 \cos^2 x}$
7. $\int_{11}^{13} \frac{10 dx}{\sin^2(\frac{5x + 5}{9}) \cdot \cos(\frac{5x + 5}{9})}$
8. $\int_1^3 9 \operatorname{ctg}^3(\frac{2x + 6}{4}) dx$
9. $\int_1^5 18e^{1x} \cos^2 x dx$
10. $\int_1^4 6 \sin(\ln(5x + 6)) dx$
11. $\int_1^1 (5x - 1)(6x - 3) dx$
12. $\int \frac{2 dx}{(7x + 1)^2}$
13. $\int \frac{8x dx}{(7x - 6)^2}$
14. $\int \frac{6 dx}{2x^2 + 28x + 98}$
15. $\int \frac{(2x - 1) dx}{6x^2 - 84x + 510}$
16. $\int \frac{(8x + 3) dx}{5 + 7x^2}$
17. $\int \frac{(x^2 + 3) dx}{8 - 11x^2}$
18. $\int (7 + 5x)(8 + 4\sqrt{x^3}) dx$
19. $\int \frac{\sqrt{6x + 4} dx}{5}$
20. $\int \frac{5 dx}{\sqrt{6x^2 - 48x + 90}}$
21. $\int \sqrt{9 - 4x^2} dx$
22. $\int 4x^2 \sin(2x + 1) dx$
23. $\int 2 \cos^3(3x + 4) dx$
24. $\int \frac{4 dx}{\sin(3x - 7)}$
25. $\int 6 \sin(8x - 2) \sqrt{1 + 4 \sin^2(8x - 2)} dx$
26. $\int \frac{2 dx}{\sin^2(3x - 4) \cos^2(3x - 4)}$
27. $\int \frac{3 \cos(4x - 6) dx}{\sin^2(4x - 6)}$
28. $\int \sin(5x + 1) \sin(4x - 2) dx$
29. $\int \operatorname{ctg}^3(7x - 3) dx$
30. $\int x \operatorname{arcctg}(3x + 7) dx$
31. $\int (8x^2 - 2x + 9)7^{x+6} dx$
32. $\int \frac{x dx}{\operatorname{ch}^2(5x + 4)}$
33. $\int (8x + 4) \ln(3x - 5) dx$
34. $\int \frac{(5x^2 + 1x + 1) dx}{4x^2 + 8x + 4}$
35. $\int \frac{7 dx}{64 - x^3}$
36. $\int \frac{(2x - 4) dx}{(x^2 - 2x - 8)(x^2 - 0x - 16)}$
37. $\int \sqrt{3x^2 - 9x - 12} dx$
38. $\int \frac{10x^2 + 16x - 270}{x^4 - 50x^2 + 625} dx$
39. $\int \frac{6 dx}{x\sqrt{3 - 6x}}$
40. $\int \frac{7x dx}{(5x - 3)^9}$

Вариант 67

1. $\int_1^3 \frac{x^2 dx}{(4 + 5x)^2}$.
2. $\int_3^7 \frac{13 dx}{x(6 + 3x)^2}$.
3. $\int_3^8 \frac{16x^2 dx}{1 - x^2}$.
4. $\int_3^7 \frac{17 dx}{(1 - 16x)\sqrt{x^3}}$.
5. $\int_3^6 \frac{x^3 dx}{\sqrt{9 + x^2}}$.
6. $\int_5^6 \frac{24 dx}{100 + 16 \cos^2 x}$.
7. $\int_3^4 \frac{4 \operatorname{tg}\left(\frac{6x + 7}{10}\right) dx}{1 - \cos\left(\frac{6x + 7}{10}\right)}$.
8. $\int_2^4 \frac{7 dx}{1 + \operatorname{ctg}\left(\frac{2x + 3}{7}\right)}$.
9. $\int_2^4 17e^{-3x} \cos^2 x dx$.
10. $\int_1^3 \frac{\ln(5 + 7x) dx}{x^2}$.
11. $\int x(7x - 2)(4x - 5) dx$
12. $\int \frac{5x dx}{(7x - 6)}$
13. $\int \frac{2 dx}{x(7x + 7)}$
14. $\int \frac{3 dx}{2x^2 + 20x + 122}$
15. $\int \frac{(2x - 2) dx}{4x^2 - 56x + 232}$
16. $\int \frac{5x dx}{9 + 4x^2}$
17. $\int \frac{5x dx}{6 - 9x^2}$
18. $\int (5 + 7\sqrt{x})(8 + 1\sqrt{x}) dx$
19. $\int (\sqrt{3x + 7} + \sqrt{5x + 4}) dx$
20. $\int \frac{7 dx}{x\sqrt{84x^2 + 49x + 3}}$
21. $\int \frac{7x dx}{\sqrt{11 + 3x^2}}$
22. $\int (5x - 2) \cos(2x + 2) dx$
23. $\int 7 \cos^4(4x + 1) dx$
24. $\int \frac{2 dx}{\cos(7x - 5)}$
25. $\int \frac{8 dx}{8 - 5 \sin^2(2x + 6)}$
26. $\int \frac{9 dx}{\sin^2(5x - 5) \cos^2(5x - 5)}$
27. $\int \frac{5 \sin^2(4x - 3) dx}{\cos(4x - 3)}$
28. $\int \sin(4x - 5) \sin(3x + 5) dx$
29. $\int \operatorname{tg}^3(5x - 3) dx$
30. $\int \operatorname{arcctg}(6x - 5) dx$
31. $\int (4x + 1)5^{9x-5} dx$
32. $\int \frac{x dx}{\operatorname{ch}^2(5x - 1)}$
33. $\int \frac{\ln(3x - 1) dx}{(3x - 1)^2}$
34. $\int \frac{(2x^2 - 5x - 5) dx}{2x^2 + 6x + 4}$
35. $\int \frac{2 dx}{125 + x^3}$
36. $\int \frac{(2x - 1) dx}{(x^2 - 9x + 18)(x^2 - 3x - 18)}$
37. $\int \sqrt{-3x^2 - 24x - 36} dx$
38. $\int \frac{4x^2 - 9x - 10}{x^3 - 8} dx$
39. $\int \frac{2 dx}{x\sqrt{3 - 3x}}$
40. $\int 5x(8x + 2)^{11} dx$

Вариант 68

1. $\int_1^6 \frac{x dx}{(4 - 6x)^2}$.
2. $\int_2^8 \frac{21 dx}{x(6 - 6x)}$.
3. $\int_3^8 \frac{14x^2 dx}{1 - x^2}$.
4. $\int_2^5 \frac{17 dx}{(4 - 9x)\sqrt{x^3}}$.
5. $\int_3^8 \frac{x^3 dx}{\sqrt{x^2 - 1}}$.
6. $\int_7^8 \frac{20 dx}{16 - 9 \sin^2 x}$.
7. $\int_3^4 \frac{4 \cos(\frac{5x+2}{7}) dx}{\sin(\frac{5x+2}{7}) + \cos(\frac{5x+2}{7})}$.
8. $\int_2^4 \frac{6 \operatorname{tg}(\frac{5x+4}{4}) dx}{\operatorname{tg}(\frac{5x+4}{4}) + 1}$.
9. $\int_0^5 15e^{-1x} \sin^2 x dx$.
10. $\int_4^4 3 \sin(\ln(4x + 4)) dx$.
11. $\int_2^2 x^n(3x + 2)^2 dx$
12. $\int \frac{3x dx}{(7x + 3)^3}$
13. $\int \frac{2 dx}{x(8x - 5)}$
14. $\int \frac{2 dx}{5x^2 + 50x + 105}$
15. $\int \frac{(3x - 3) dx}{3x^2 - 6x + 3}$
16. $\int \frac{(x^2 + 9) dx}{3 + 9x^2}$
17. $\int \frac{6x dx}{5 - 4x^2}$
18. $\int (6 + 5x)^{4/9} dx$
19. $\int x\sqrt{8 + 4x} dx$
20. $\int \frac{7 dx}{x\sqrt{-21856x^2 - 6720x + 4}}$
21. $\int \frac{8x dx}{\sqrt{2 - 6x^2}}$
22. $\int 2x^2 \sin(5x + 4) dx$
23. $\int 6 \sin^3(8x - 5) \cos(8x - 5) dx$
24. $\int \frac{6 dx}{\sin(3x + 1)}$
25. $\int 3 \sin(7x - 5) \sqrt{1 + 2 \cos^2(7x - 5)} dx$
26. $\int \frac{4 dx}{\sin^3(5x + 6) \cos^3(5x + 6)}$
27. $\int \frac{7 \cos(5x + 6) dx}{\sin^2(5x + 6)}$
28. $\int \sin(8x - 7) \cos(2x + 4) dx$
29. $\int \operatorname{ctg}^3(8x + 2) dx$
30. $\int \operatorname{arctg}(8x + 7) dx$
31. $\int e^{7x} \cos(4x - 4) dx$
32. $\int \operatorname{sh}(5x + 2) \operatorname{ch}(5x + 2) dx$
33. $\int 6 \ln(5x - 6) dx$
34. $\int \frac{(2x^2 - 2x - 0) dx}{6x^2 - 12x + 6}$
35. $\int \frac{8 dx}{16x^2 + x^4}$
36. $\int \frac{(3x - 1) dx}{(x^2 - 3x - 18)(x^2 - 2x - 15)}$
37. $\int \sqrt{3x^2 + 21x + 36} dx$
38. $\int \frac{-1x^2 + 4x + 25}{x^3 - 10x^2 + 25x} dx$
39. $\int \frac{8x^{3/2} + 5x^{5/3} + 3}{\sqrt{x}} dx$
40. $\int 3x(5x + 5)^8 dx$

Вариант 69

1. $\int_1^5 \frac{x^3 dx}{7 + 11x}$.
2. $\int_3^5 \frac{21dx}{(3 + 3x)(-6 + 6x)}$.
3. $\int_2^8 \frac{9dx}{x(36 + x^2)}$.
4. $\int_3^6 \frac{10dx}{(9 - 4x)\sqrt{x^3}}$.
5. $\int_3^6 \frac{19 dx}{(1 + x^2)^{3/2}}$.
6. $\int_5^6 \frac{24 dx}{100 + 16 \cos^2 x}$.
7. $\int_3^4 \frac{11 dx}{\sin^2\left(\frac{6x + 6}{7}\right) \cdot \cos\left(\frac{6x + 6}{7}\right)}$.
8. $\int_1^2 \frac{3 \operatorname{tg}\left(\frac{3x + 7}{6}\right) dx}{\operatorname{tg}\left(\frac{3x + 7}{6}\right) - 1}$.
9. $\int_2^6 19e^{-1x} \cos^2 x dx$.
10. $\int_1^6 x \ln(5 + 9x) dx$.
11. $\int_1^1 (6x - 1)^n dx$
12. $\int \frac{4x dx}{(5x - 4)}$
13. $\int \frac{4 dx}{x^2(8x - 3)}$
14. $\int \frac{7 dx}{3x^2 - 15x + 18}$
15. $\int \frac{(5x + 4) dx}{7x^2 - 42x + 35}$
16. $\int \frac{2x dx}{3 + 2x^2}$
17. $\int \frac{(6x^2 + 4) dx}{11 - 3x^2}$
18. $\int (7 - 6x)(5 + 2\sqrt{x^3}) dx$
19. $\int \sqrt{(6 - 7x)^3} dx$
20. $\int \frac{5 dx}{x\sqrt{-126x^2 - 24x + 3}}$
21. $\int \frac{2x dx}{\sqrt{11x^2 - 9}}$
22. $\int (2x + 4) \left(\sin(8x + 6) + \cos(8x + 6) \right) dx$
23. $\int 3 \cos^4(9x + 3) dx$
24. $\int \frac{8x dx}{1 - \sin(7x - 5)}$
25. $\int \frac{9 dx}{7 - 6 \sin^2(6x - 6)}$
26. $\int \frac{4 dx}{\sin^2(8x - 3) \cos^4(8x - 3)}$
27. $\int \frac{3 \cos(8x - 4) dx}{\sin^3(8x - 4)}$
28. $\int \cos(8x + 2) \cos(7x + 2) dx$
29. $\int \operatorname{tg}^4(2x - 6) dx$
30. $\int x \arccos(8x - 3) dx$
31. $\int (3x + 3)5^{9x-6} dx$
32. $\int \frac{x dx}{\operatorname{ch}^2(2x + 4)}$
33. $\int 2x^2 \ln(6x + 3) dx$
34. $\int \frac{(5x^2 - 6x + 2) dx}{2x^2 + 12x + 16}$
35. $\int \frac{(6x - 6) dx}{4x^2 + x^4}$
36. $\int \frac{(2x - 6) dx}{(x^2 + 3x - 28)(x^2 + 2x - 35)}$
37. $\int \sqrt{3x^2 - 9x - 12} dx$
38. $\int \frac{2x^2 - 15x - 24}{x^4 - 32x^2 + 256} dx$
39. $\int \frac{(8 + 3x) dx}{7 + \sqrt{x}}$
40. $\int 7x(8x + 2)^8 dx$

Вариант 70

1. $\int_1^4 \frac{x^2 dx}{(3 + 3x)^2}$.
2. $\int_1^5 \frac{16 dx}{x^2(4 + 6x)}$.
3. $\int_2^6 \frac{x dx}{3x^2 + 4x + 6}$.
4. $\int_1^7 \frac{9 dx}{x\sqrt{2 + 4x}}$.
5. $\int_6^{12} \frac{x^3 dx}{\sqrt{x^2 - 16}}$.
6. $\int_7^8 \frac{22 dx}{16 + 9 \cos^2 x}$.
7. $\int_0^2 \frac{5 dx}{\sin(\frac{2x + 7}{9}) \cdot \cos^2(\frac{2x + 7}{9})}$.
8. $\int_5^6 \frac{9 \operatorname{tg}(\frac{4x + 6}{8}) dx}{\operatorname{tg}(\frac{4x + 6}{8}) - 1}$.
9. $\int_0^5 14e^{-3x} \cos^2 x dx$.
10. $\int_2^5 x \ln(5 + 10x) dx$.
11. $\int (2x - 3)(3x + 5) dx$
12. $\int \frac{6x dx}{(5x + 1)}$
13. $\int \frac{7 dx}{x^2(3x - 6)}$
14. $\int \frac{5 dx}{5x^2 + 10x + 50}$
15. $\int \frac{(4x - 3) dx}{7x^2 + 7x - 210}$
16. $\int \frac{(x^2 + 8) dx}{9 + 10x^2}$
17. $\int \frac{(4x^2 + 3) dx}{7 - 9x^2}$
18. $\int \sqrt{x}(2 - 4x) dx$
19. $\int x\sqrt{5 + 4x} dx$
20. $\int \frac{6 dx}{x\sqrt{-20x^2 + 15x + 5}}$
21. $\int \sqrt{9 - 9x^2} dx$
22. $\int 3x^2 \sin(6x - 4) dx$
23. $\int 7 \cos^5(8x + 1) dx$
24. $\int \frac{7 dx}{\sin(8x - 3)}$
25. $\int 9 \cos(4x + 5) \sqrt{1 + 5 \sin^2(4x + 5)} dx$
26. $\int \frac{8 dx}{\sin^4(7x + 3) \cos^2(7x + 3)}$
27. $\int \frac{7 \sin(2x + 5) dx}{\cos^2(2x + 5)}$
28. $\int \sin(5x - 1) \sin(7x + 4) dx$
29. $\int \operatorname{ctg}^2(3x + 3) dx$
30. $\int \arccos(5x - 2) dx$
31. $\int (8x^2 - 4x + 5)e^{x+5} dx$
32. $\int \operatorname{sh}^2(8x - 5) \operatorname{ch}(8x - 5) dx$
33. $\int 9x^2 \ln(8x + 7) dx$
34. $\int \frac{(4x^2 - 7x + 3) dx}{6x^2 + 12x + 6}$
35. $\int \frac{4 dx}{9x^2 + x^4}$
36. $\int \frac{(2x - 4) dx}{(x^2 + 6x + 5)(x^2 - 1x - 30)}$
37. $\int \sqrt{4x^2 + 32x + 68} dx$
38. $\int \frac{10x^2 + 16x - 270}{x^4 - 50x^2 + 625} dx$
39. $\int \frac{(2 - 7x) dx}{3 + \sqrt[3]{x}}$
40. $\int \frac{9x dx}{(8x - 3)^{10}}$

Вариант 71

1. $\int_2^4 \frac{x dx}{(7 + 4x)^2}$.
2. $\int_1^7 \frac{21 dx}{x(3 + 5x)^2}$.
3. $\int_2^6 \frac{x dx}{2x^2 + 6x + 3}$.
4. $\int_1^4 \frac{11 dx}{\sqrt{2 + 6x}\sqrt{15 - 3x}}$.
5. $\int_2^5 \frac{x^2 dx}{\sqrt{1 + x^2}}$.
6. $\int_2^3 \frac{31 dx}{49 - 25 \cos^2 x}$.
7. $\int_3^4 \frac{10 \sin(\frac{5x + 6}{8}) dx}{\sin(\frac{5x + 6}{8}) - \cos(\frac{5x + 6}{8})}$.
8. $\int_6^7 \frac{4 dx}{\operatorname{tg}(\frac{4x + 4}{9}) - 1}$.
9. $\int_0^3 14e^{-4x} \sin^2 x dx$.
10. $\int_1^6 \frac{\ln(5 + 7x) dx}{x^2}$.
11. $\int (5x + 7)^n dx$
12. $\int \frac{4 dx}{(8x + 7)^2}$
13. $\int \frac{9 dx}{x(8x - 6)}$
14. $\int \frac{6 dx}{4x^2 - 56x + 196}$
15. $\int \frac{(6x - 4) dx}{6x^2 - 84x + 294}$
16. $\int \frac{(6x - 1) dx}{5 + 3x^2}$
17. $\int \frac{2x dx}{3 - 6x^2}$
18. $\int \sqrt{x^3}(3 + 2x) dx$
19. $\int \frac{4 dx}{\sqrt{8 + 1x}}$
20. $\int \frac{4 dx}{x\sqrt{-1029x^2 - 294x + 5}}$
21. $\int \sqrt{2x^2 - 6} dx$
22. $\int 6x^2 \sin(9x + 5) dx$
23. $\int (8x - 5 \cos^2(7x + 1)) dx$
24. $\int \frac{8 \cos x dx}{1 + \cos(2x - 2)}$
25. $\int \frac{8 dx}{2 - 3 \sin(8x - 4)}$
26. $\int \frac{9 dx}{\sin(6x + 7) \cos^2(6x + 7)}$
27. $\int \frac{8 \sin(5x + 4) dx}{\cos^3(5x + 4)}$
28. $\int \sin(7x + 6) \sin(6x + 5) dx$
29. $\int \operatorname{tg}^3(4x - 4) dx$
30. $\int x \operatorname{arctg}(5x + 2) dx$
31. $\int e^{8x} \cos^2(2x - 6) dx$
32. $\int \operatorname{sh}(7x + 7) \operatorname{ch}^2(7x + 7) dx$
33. $\int 5x^2 \ln(2x - 7) dx$
34. $\int \frac{(6x^2 + 3x + 2) dx}{5x^2 + 50x + 120}$
35. $\int \frac{5 dx}{16x^2 - x^4}$
36. $\int \frac{(5x - 7) dx}{(x^2 + 13x + 42)(x^2 + 9x + 14)}$
37. $\int \sqrt{7x^2 + 84x + 280} dx$
38. $\int \frac{x^2 - 30x + 108}{x^3 + 216} dx$
39. $\int \frac{9 dx}{3 + 4x^{8/6}}$
40. $\int 5x^2(2x + 7)^5 dx$

Вариант 72

1. $\int_1^6 \frac{x^3 dx}{4 + 10x}$
2. $\int_1^5 \frac{16 dx}{x(5 + 6x)^2}$
3. $\int_1^5 \frac{x dx}{3x^2 - 3x + 3}$
4. $\int_1^3 \frac{11 dx}{x\sqrt{3 + 2x}}$
5. $\int_3^7 \frac{x^2 dx}{\sqrt{x^2 - 1}}$
6. $\int_2^3 \frac{19 dx}{64 + 36 \cos^2 x}$
7. $\int_5^7 \frac{6 \operatorname{tg}\left(\frac{3x + 3}{11}\right) dx}{1 + \cos\left(\frac{3x + 3}{11}\right)}$
8. $\int_2^3 \frac{2 \operatorname{tg}\left(\frac{4x + 6}{8}\right) dx}{\operatorname{tg}\left(\frac{4x + 6}{8}\right) + 1}$
9. $\int_0^5 19e^{-4x} \sin^2 x dx$
10. $\int_2^3 8 \sin(\ln(7x + 7)) dx$
11. $\int (6x + 5)^2 (5x - 1)^2 dx$
12. $\int \frac{4 dx}{(5x - 2)^3}$
13. $\int \frac{dx}{(6x + 5)(8x + 4)}$
14. $\int \frac{7 dx}{3x^2 + 24x + 48}$
15. $\int \frac{(3x - 5) dx}{6x^2 + 84x + 444}$
16. $\int \frac{7x^2 dx}{5 + 1x^2}$
17. $\int \frac{(5x - 5) dx}{2 - 2x^2}$
18. $\int \sqrt{x^3}(5 + 7\sqrt{x}) dx$
19. $\int x \sqrt{(6 - 4x)^3} dx$
20. $\int \frac{5 dx}{x\sqrt{448x^2 - 224x + 4}}$
21. $\int \sqrt{10 - 5x^2} dx$
22. $\int 5x^2 \cos(4x + 6) dx$
23. $\int 5 \sin^2(9x - 1) \cos^2(9x - 1) dx$
24. $\int \frac{6 dx}{1 - \sin(5x + 6)}$
25. $\int 7 \cos(3x - 3) \sqrt{1 - 9 \sin^2(3x - 3)} dx$
26. $\int \frac{7 dx}{\sin^2(4x - 2) \cos(4x - 2)}$
27. $\int \frac{7 \sin(5x + 5) dx}{\cos^3(5x + 5)}$
28. $\int \cos(4x - 7) \cos(7x - 6) dx$
29. $\int \operatorname{ctg}^2(3x + 3) dx$
30. $\int x \arcsin(4x - 1) dx$
31. $\int (3x^2 + 1x + 4)3^{x-5} dx$
32. $\int \operatorname{sh}(7x + 4) \operatorname{ch}(7x + 4) dx$
33. $\int 4x^2 \ln(8x + 2) dx$
34. $\int \frac{(3x^2 + 6x + 4) dx}{7x^2 + 35x + 28}$
35. $\int \frac{6 dx}{1x^2 + x^4}$
36. $\int \frac{(2x - 1) dx}{(x^2 + 1x - 6)(x^2 - 9x + 14)}$
37. $\int \sqrt{-5x^2 - 70x - 165} dx$
38. $\int \frac{7x^2 - 29x - 196}{x^4 - 49x^2} dx$
39. $\int \frac{(2 - 1x) dx}{5 + \sqrt{x}}$
40. $\int \frac{4x dx}{(7x + 2)^8}$

Вариант 73

1. $\int_3^5 \frac{x^3 dx}{7 + 7x}$.
2. $\int_2^5 \frac{15x dx}{(6 + x)(2 + x)}$.
3. $\int_1^6 \frac{11dx}{x(49 + x^2)}$.
4. $\int_3^8 \frac{10 dx}{x\sqrt{6 + 8x}}$.
5. $\int_2^5 \frac{x^3 dx}{\sqrt{25 + x^2}}$.
6. $\int_5^6 \frac{25 dx}{64 - 36 \sin^2 x}$.
7. $\int_2^3 \frac{8 \operatorname{ctg}(\frac{4x + 5}{8}) dx}{1 + \sin(\frac{4x + 5}{8})}$.
8. $\int_6^7 \frac{5 \operatorname{tg}(\frac{4x + 5}{9}) dx}{\operatorname{tg}(\frac{4x + 5}{9}) - 1}$.
9. $\int_0^1 14e^{-1x} \cos^2 x dx$.
10. $\int_1^4 \frac{\ln(3 + 9x) dx}{x^2}$.
11. $\int (3x - 6)(2x - 2) dx$
12. $\int \frac{5 dx}{(4x + 1)^2}$
13. $\int \frac{dx}{(4x + 3)(7x - 4)}$
14. $\int \frac{(4x - 5) dx}{7x^2 + 42x + 126}$
15. $\int \frac{(8x - 6) dx}{7x^2 - 42x + 35}$
16. $\int \frac{(8x - 6) dx}{10 + 6x^2}$
17. $\int \frac{8x dx}{9 - 3x^2}$
18. $\int (7 - 4x)(6 + 5\sqrt{x^3}) dx$
19. $\int \frac{\sqrt{7 + 5x} dx}{5 dx}$
20. $\int \frac{5 dx}{x\sqrt{-9x^2 - 6x + 3}}$
21. $\int \sqrt{11 + 10x^2} dx$
22. $\int 2x^2 \cos(7x - 3) dx$
23. $\int 7 \sin(4x - 3) \cos^2(4x - 3) dx$
24. $\int \frac{8 dx}{1 - \cos(6x - 5)}$
25. $\int \frac{2 dx}{8 - 2 \sin(9x + 4)}$
26. $\int \frac{2 dx}{\sin^2(5x - 7) \cos(5x - 7)}$
27. $\int \frac{2 \sin^2(6x - 2) dx}{\cos^4(6x - 2)}$
28. $\int \cos(5x - 6) \cos(9x - 1) dx$
29. $\int \operatorname{tg}^2(5x + 1) dx$
30. $\int \arccos(7x - 5) dx$
31. $\int (3x + 7)9^{2x+1} dx$
32. $\int x^2 \operatorname{sh}(5x + 7) dx$
33. $\int 3x^2 \ln(4x - 7) dx$
34. $\int \frac{(3x^2 - 3x - 7) dx}{7x^2 - 28x + 35}$
35. $\int \frac{(3x - 2) dx}{256 - x^4}$
36. $\int \frac{(5x + 4) dx}{(x^2 + 4x - 5)(x^2 - 0x - 1)}$
37. $\int \sqrt{-6x^2 + 84x - 270} dx$
38. $\int \frac{6x^2 - 10x + 0}{x^4 - 9x^2} dx$
39. $\int \frac{3 dx}{x\sqrt{8 - 4x}}$
40. $\int \frac{3x dx}{(8x - 3)^{10}}$

Вариант 74

1. $\int_3^8 \frac{x dx}{(4 + 5x)^3}$.
2. $\int_1^3 \frac{13 dx}{x^2(7 - 2x)}$.
3. $\int_2^4 \frac{x dx}{3x^2 - 2x - 6}$.
4. $\int_3^5 \frac{10\sqrt{x} dx}{1 - 36x}$.
5. $\int_2^4 \frac{x^3 dx}{\sqrt{4 + x^2}}$.
6. $\int_5^6 \frac{20 dx}{9 - 4 \sin^2 x}$.
7. $\int_4^5 \frac{6 \cos(\frac{4x + 7}{12}) dx}{\sin(\frac{4x + 7}{12}) - \cos(\frac{4x + 7}{12})}$.
8. $\int_1^2 \frac{9 \operatorname{tg}(\frac{2x + 7}{6}) dx}{\operatorname{tg}(\frac{2x + 7}{6}) + 1}$.
9. $\int_0^4 19e^{1x} \cos^2 x dx$.
10. $\int_2^5 x \ln(4 + 10x) dx$.
11. $\int x^n (4x + 3)^2 dx$
12. $\int \frac{6 dx}{(2x - 1)^3}$
13. $\int \frac{9 dx}{x(3x - 7)}$
14. $\int \frac{3 dx}{3x^2 + 15x - 18}$
15. $\int \frac{(5x + 6) dx}{2x^2 - 16x + 130}$
16. $\int \frac{2x^2 dx}{3 + 6x^2}$
17. $\int \frac{5x dx}{(2 - 5x^2)^2}$
18. $\int \sqrt{x}(4 + 3x) dx$
19. $\int \sqrt{5 - 7x} dx$
20. $\int \frac{5 dx}{\sqrt{5x^2 + 10x + 5}}$
21. $\int \sqrt{11x^2 - 5} dx$
22. $\int (4x + 1) \sin(7x - 4) dx$
23. $\int 7 \sin^3(4x - 1) dx$
24. $\int \frac{7 dx}{\sin^3(8x - 5)}$
25. $\int 6 \sin(8x + 5) \sqrt{1 - 5 \cos^2(8x + 5)} dx$
26. $\int \frac{8 dx}{\sin^4(5x - 1) \cos^2(5x - 1)}$
27. $\int \frac{5 \cos^3(8x - 2) dx}{\sin(8x - 2)}$
28. $\int \sin(5x + 7) \cos(3x - 1) dx$
29. $\int \operatorname{ctg}^2(5x + 2) dx$
30. $\int \arcsin(2x + 4) dx$
31. $\int \frac{7 dx}{3 + e^{-1x}}$
32. $\int x \operatorname{sh}(6x - 5) dx$
33. $\int 6x^2 \ln(7x + 2) dx$
34. $\int \frac{(5x^2 + 3x - 0) dx}{6x^2 - 6x - 120}$
35. $\int \frac{4 dx}{16 - x^4}$
36. $\int \frac{(2x + 3) dx}{(x^2 + 1x - 2)(x^2 - 3x - 10)}$
37. $\int \sqrt{-7x^2 - 42x - 56} dx$
38. $\int \frac{10x^2 + 3x + 36}{x^4 + 9x^2} dx$
39. $\int \frac{(5 - 3x) dx}{7 + \sqrt{x}}$
40. $\int \frac{9x^2 dx}{(4x - 5)^7}$

Вариант 75

1. $\int_3^8 \frac{x dx}{(7+2x)^2}$.
2. $\int_3^9 \frac{18dx}{x(7+5x)^2}$.
3. $\int_2^8 \frac{16x^2 dx}{1-x^2}$.
4. $\int_3^8 \frac{15dx}{(16+36x)\sqrt{x^3}}$.
5. $\int_1^6 \frac{x^3 dx}{\sqrt{81-x^2}}$.
6. $\int_5^6 \frac{33 dx}{36-9\cos^2 x}$.
7. $\int_4^6 \frac{10 dx}{\sin(\frac{3x+5}{8}) \cdot \cos^2(\frac{3x+5}{8})}$.
8. $\int_{-2}^{-1} 7 \operatorname{tg}^4(\frac{2x+6}{3}) dx$.
9. $\int_3^8 \frac{6 dx}{4+8e^{-3x}}$.
10. $\int_6^6 x \ln(6+4x) dx$.
11. $\int_2^2 (5x+6)^n dx$
12. $\int \frac{4x dx}{(6x-5)}$
13. $\int \frac{3x dx}{(2x+6)^2}$
14. $\int \frac{2 dx}{4x^2-28x+24}$
15. $\int \frac{(5x+4) dx}{7x^2+42x+175}$
16. $\int \frac{3x dx}{6+2x^2}$
17. $\int \frac{(3x^2+3) dx}{5-11x^2}$
18. $\int (7-2\sqrt{x})(6-1\sqrt{x^3}) dx$
19. $\int \sqrt{\frac{6+5x}{3+3x}} dx$
20. $\int \frac{4 dx}{x\sqrt{-3600x^2-960x+5}}$
21. $\int \sqrt{11x^2+3} dx$
22. $\int (3x+3) \sin^2(8x-3) dx$
23. $\int 6 \sin^2(7x+3) \cos(7x+3) dx$
24. $\int \frac{5 dx}{\cos(8x-2)}$
25. $\int 4 \sin(6x-2) \sqrt{1+7\sin^2(6x-2)} dx$
26. $\int \frac{8 dx}{\sin^4(3x+7) \cos^2(3x+7)}$
27. $\int \frac{4 \sin^3(2x-3) dx}{\cos(2x-3)}$
28. $\int \sin(3x+1) \sin(5x-4) dx$
29. $\int \operatorname{tg}^3(2x-6) dx$
30. $\int x \arcsin(4x-1) dx$
31. $\int (2x-5)e^{3x-3} dx$
32. $\int \operatorname{sh}(3x-6) \operatorname{ch}^2(3x-6) dx$
33. $\int 4x^3 \ln(6x+1) dx$
34. $\int \frac{(3x^2+4x-3) dx}{7x^2+7x-140}$
35. $\int \frac{(6x-6) dx}{4x^2+x^4}$
36. $\int \frac{(4x+2) dx}{(x^2-3x-28)(x^2-12x+35)}$
37. $\int \sqrt{-2x^2-16x-14} dx$
38. $\int \frac{4x^2-15x+0}{x^4-256} dx$
39. $\int \frac{8 dx}{x\sqrt{3-7x}}$
40. $\int \frac{8x dx}{(6x-4)^8}$

Вариант 76

1. $\int_3^8 \frac{x^4 dx}{1 + 10x}$.
2. $\int_3^8 \frac{18dx}{x(4 + 5x)}$.
3. $\int_3^8 \frac{9dx}{x^2(25 + x^2)}$.
4. $\int_1^3 \frac{15 dx}{\sqrt{2 + 6x}\sqrt{15 - 4x}}$.
5. $\int_2^5 \frac{22 dx}{(x^2 - 1)^{3/2}}$.
6. $\int_7^8 \frac{22 dx}{81 - 36 \sin^2 x}$.
7. $\int_0^1 \frac{9 \operatorname{ctg}(\frac{6x + 6}{10}) dx}{1 + \sin(\frac{6x + 6}{10})}$.
8. $\int_{-1}^0 \frac{6 dx}{1 - \operatorname{ctg}(\frac{2x + 5}{3})}$.
9. $\int_0^1 14e^{-2x} \sin^2 x dx$.
10. $\int_3^4 x^3 \ln(36 + x^2) dx$.
11. $\int (8x + 5)(6x + 2) dx$
12. $\int \frac{7x dx}{(4x + 3)}$
13. $\int \frac{8 dx}{x^2(5x - 7)}$
14. $\int \frac{6 dx}{2x^2 + 28x + 98}$
15. $\int \frac{(3x + 5) dx}{6x^2 + 12x + 30}$
16. $\int \frac{6x^2 dx}{8 + 9x^2}$
17. $\int \frac{(x^2 + 4) dx}{3 - 7x^2}$
18. $\int \sqrt{x}(5 - 3x) dx$
19. $\int \frac{3x dx}{\sqrt{7 - 4x}}$
20. $\int \frac{5 dx}{x\sqrt{4116x^2 - 1176x + 3}}$
21. $\int \frac{5 dx}{\sqrt{7x^2 + 9}}$
22. $\int 4x^2 \sin(7x + 1) dx$
23. $\int 7 \sin^2(3x + 2) \cos(3x + 2) dx$
24. $\int \frac{8x dx}{1 - \sin(3x + 2)}$
25. $\int 7 \cos(8x + 2) \sqrt{1 + 4 \sin^2(8x + 2)} dx$
26. $\int \frac{4 dx}{\sin^4(7x + 7) \cos^2(7x + 7)}$
27. $\int \frac{4 \cos^2(2x - 2) dx}{\sin(2x - 2)}$
28. $\int \cos(4x - 7) \cos(7x - 6) dx$
29. $\int \operatorname{tg}^4(4x + 5) dx$
30. $\int x \operatorname{arctg}(2x + 2) dx$
31. $\int (7x^2 - 4x + 8)8^{x+4} dx$
32. $\int \frac{x dx}{\operatorname{sh}^2(2x - 5)}$
33. $\int \frac{\ln(5x - 6) dx}{15x - 18}$
34. $\int \frac{(6x^2 - 1x + 2) dx}{7x^2 + 21x - 126}$
35. $\int \frac{6 dx}{1x^2 + x^4}$
36. $\int \frac{(4x + 5) dx}{(x^2 - 8x + 15)(x^2 - 3x - 10)}$
37. $\int \sqrt{7x^2 - 21x - 28} dx$
38. $\int \frac{5x^2 - 34x + 22}{x^4 - 8x^3} dx$
39. $\int \frac{(6 + 7x) dx}{5 + \sqrt[3]{x}}$
40. $\int \frac{7x^2 dx}{(3x + 2)^5}$

Вариант 77

1. $\int_2^7 \frac{x dx}{(4 + 5x)^2}$.
2. $\int_3^9 \frac{15 dx}{x(3 + 2x)}$.
3. $\int_1^5 \frac{9 dx}{x(36 + x^2)}$.
4. $\int_1^4 \frac{9 dx}{\sqrt{2 + 3x}\sqrt{11 - 2x}}$.
5. $\int_3^9 \frac{x^2 dx}{\sqrt{121 - x^2}}$.
6. $\int_7^8 \frac{33 dx}{100 - 16 \cos^2 x}$.
7. $\int_5^6 \frac{8 dx}{\sin(\frac{3x + 3}{8}) \cdot \cos^3(\frac{3x + 3}{8})}$.
8. $\int_4^6 \frac{4 \operatorname{tg}(\frac{7x + 3}{8}) dx}{\operatorname{tg}(\frac{7x + 3}{8}) - 1}$.
9. $\int_2^6 19e^{-1x} \cos^2 x dx$.
10. $\int_2^6 5 \sin(\ln(6x + 7)) dx$.
11. $\int (4x - 4)^2(9x - 6)^2 dx$
12. $\int \frac{(4x + 6) dx}{(7x - 7)}$
13. $\int \frac{5 dx}{x(2x - 2)}$
14. $\int \frac{6 dx}{7x^2 - 98x + 595}$
15. $\int \frac{(4x - 3) dx}{7x^2 - 63x + 140}$
16. $\int \frac{6x^3 dx}{2 + 8x^2}$
17. $\int \frac{6x dx}{5 - 4x^2}$
18. $\int (6 - 3x^{9/2}) dx$
19. $\int \frac{7 dx}{\sqrt{8 - 7x}}$
20. $\int \frac{5 dx}{x\sqrt{-2688x^2 - 1344x + 7}}$
21. $\int \sqrt{6 - 8x^2} dx$
22. $\int 5x^2 \sin(6x - 3) dx$
23. $\int 7 \sin^4(6x + 1) dx$
24. $\int \frac{7 dx}{1 + \cos(5x + 2)}$
25. $\int 6 \sin(8x + 5) \sqrt{1 - 5 \cos^2(8x + 5)} dx$
26. $\int \frac{6 dx}{\sin(2x - 5) \cos(2x - 5)}$
27. $\int \frac{2 \cos^2(4x - 5) dx}{\sin^4(4x - 5)}$
28. $\int \cos(3x + 2) \cos(2x + 4) dx$
29. $\int \operatorname{ctg}^2(2x - 6) dx$
30. $\int x \operatorname{arctg}(3x - 1) dx$
31. $\int e^{3x} \cos^2(7x - 1) dx$
32. $\int \operatorname{sh}(7x - 2) \operatorname{ch}(7x - 2) dx$
33. $\int 9 \ln(2x + 4) dx$
34. $\int \frac{(5x^2 + 4x - 6) dx}{4x^2 - 32x + 260}$
35. $\int \frac{6 dx}{1x^2 - x^4}$
36. $\int \frac{(4x + 6) dx}{(x^2 - 3x - 18)(x^2 - 0x - 36)}$
37. $\int \sqrt{7x^2 - 14x - 21} dx$
38. $\int \frac{5x^2 - 26x + 0}{x^3 - 12x^2 + 36x} dx$
39. $\int \frac{4 dx}{2 - 1x^{3/4}}$
40. $\int 5x(2x - 4)^6 dx$

Вариант 78

1. $\int_3^9 \frac{x dx}{(3 + 4x)^2}$.
2. $\int_1^6 \frac{13x dx}{(3 + x)(5 + x)}$.
3. $\int_1^3 \frac{x dx}{3x^2 + 6x + 1}$.
4. $\int_1^3 \frac{11dx}{(16 - 25x)\sqrt{x^3}}$.
5. $\int_6^{12} \frac{x^3 dx}{\sqrt{x^2 - 16}}$.
6. $\int_9^{10} \frac{20 dx}{81 - 9 \sin^2 x}$.
7. $\int_9^{11} \frac{8 dx}{\sin^2(\frac{3x + 6}{9}) \cdot \cos(\frac{3x + 6}{9})}$.
8. $\int_3^5 \frac{5 dx}{\operatorname{tg}(\frac{2x + 4}{8}) - 1}$.
9. $\int_3^7 \frac{9 dx}{4 + 5e^{-3x}}$.
10. $\int_2^5 \frac{\ln(4 + 3x) dx}{x^2}$.
11. $\int (5x - 1)(6x - 3) dx$
12. $\int \frac{(5x - 6) dx}{(7x + 4)}$
13. $\int \frac{5 dx}{x(4x + 4)}$
14. $\int \frac{6 dx}{5x^2 + 55x + 150}$
15. $\int \frac{(5x - 5) dx}{5x^2 - 20x + 100}$
16. $\int \frac{2x dx}{(5 + 8x^2)^2}$
17. $\int \frac{(5x^2 + 6) dx}{7 - 11x^2}$
18. $\int (3 + 3\sqrt{x})(4 + 1\sqrt{x}) dx$
19. $\int \frac{5x dx}{\sqrt{2 - 3x}}$
20. $\int \frac{4 dx}{\sqrt{3x^2 + 12x + 159}}$
21. $\int \frac{8x dx}{\sqrt{7x^2 - 10}}$
22. $\int 8x^2 \cos(5x + 6) dx$
23. $\int 5 \sin^2(6x + 1) \cos^2(6x + 1) dx$
24. $\int \frac{8 dx}{1 - \sin(6x + 1)}$
25. $\int 8 \cos(2x + 2) \sqrt{1 - 8 \sin^2(2x + 2)} dx$
26. $\int \frac{2 dx}{\sin^2(3x + 5) \cos^4(3x + 5)}$
27. $\int \frac{4 \cos^3(7x - 4) dx}{\sin(7x - 4)}$
28. $\int \sin(2x + 3) \cos(8x - 6) dx$
29. $\int \operatorname{tg}^3(6x + 6) dx$
30. $\int x \operatorname{arctg}(3x - 4) dx$
31. $\int e^{5x} \sin^2(8x + 2) dx$
32. $\int x^2 \operatorname{ch}(5x + 5) dx$
33. $\int \frac{\ln(8x + 2) dx}{72x + 18}$
34. $\int \frac{(2x^2 - 2x - 3) dx}{4x^2 + 36x + 72}$
35. $\int \frac{2 dx}{1296 - x^4}$
36. $\int \frac{(2x + 6) dx}{(x^2 - 1x - 42)(x^2 + 5x - 6)}$
37. $\int \sqrt{-6x^2 + 60x - 54} dx$
38. $\int \frac{8x^2 - 6x + 64}{x^4 - 256} dx$
39. $\int \frac{(2 - 1x) dx}{5 + \sqrt{x}}$
40. $\int 2x^2(6x + 4)^9 dx$

Вариант 79

1. $\int_3^8 \frac{x dx}{(3 - 3x)^2}$.
2. $\int_3^6 \frac{20 dx}{x(6 - 4x)^2}$.
3. $\int_2^8 \frac{16x^2 dx}{1 - x^2}$.
4. $\int_1^3 \frac{8\sqrt{x} dx}{1 - 9x}$.
5. $\int_2^6 \frac{15 dx}{(9 + x^2)^{3/2}}$.
6. $\int_5^6 \frac{32 dx}{49 - 25 \cos^2 x}$.
7. $\int_2^3 \frac{10 dx}{\sin^3\left(\frac{2x+3}{3}\right) \cdot \cos\left(\frac{2x+3}{3}\right)}$.
8. $\int_{-1}^0 3 \operatorname{ctg}^3\left(\frac{3x+6}{6}\right) dx$.
9. $\int_1^2 21e^{-3x} \sin^2 x dx$.
10. $\int_2^3 x^3 \ln(9 + x^2) dx$.
11. $\int_2^2 (4x + 5)^2 (3x - 3)^2 dx$
12. $\int \frac{(7x - 1) dx}{(8x - 5)}$
13. $\int \frac{4x dx}{(3x + 2)^2}$
14. $\int \frac{7 dx}{7x^2 + 42x + 126}$
15. $\int \frac{(4x + 3) dx}{4x^2 + 24x + 36}$
16. $\int \frac{2x dx}{6 + 1x^2}$
17. $\int \frac{(x^2 + 2) dx}{11 - 5x^2}$
18. $\int \sqrt{x}(5 - 3x) dx$
19. $\int \sqrt{8x - 6} dx$
20. $\int \frac{2 dx}{x\sqrt{-6x^2 + 3x + 2}}$
21. $\int \frac{9x dx}{\sqrt{4x^2 - 8}}$
22. $\int 6x^2 \sin(2x + 2) dx$
23. $\int 5 \sin^3(8x + 1) \cos(8x + 1) dx$
24. $\int \frac{9 \sin x dx}{1 + \sin(8x + 4)}$
25. $\int 4 \sin(4x - 2) \sqrt{1 - 5 \sin^2(4x - 2)} dx$
26. $\int \frac{3 dx}{\sin^4(5x - 7) \cos^2(5x - 7)}$
27. $\int \frac{7 \sin^2(2x - 5) dx}{\cos^4(2x - 5)}$
28. $\int \cos(3x - 2) \cos(2x - 2) dx$
29. $\int \operatorname{tg}^2(8x + 6) dx$
30. $\int x \arcsin(3x + 1) dx$
31. $\int e^{7x} \cos(6x - 3) dx$
32. $\int x \operatorname{sh}(5x + 3) dx$
33. $\int 9x^3 \ln(7x + 5) dx$
34. $\int \frac{(3x^2 + 1x + 2) dx}{3x^2 - 24x + 48}$
35. $\int \frac{5 dx}{9x^2 - x^4}$
36. $\int \frac{(4x + 7) dx}{(x^2 - 11x + 28)(x^2 - 2x - 35)}$
37. $\int \sqrt{3x^2 - 3x - 126} dx$
38. $\int \frac{3x^2 - 34x + 120}{x^3 + 125} dx$
39. $\int \frac{5 dx}{8 - 3x^{5/6}}$
40. $\int \frac{7x dx}{(5x - 7)^6}$

Вариант 80

1. $\int_1^5 \frac{x^3 dx}{5 + 7x}$
2. $\int_2^5 \frac{21 dx}{x^2(4 + 5x)}$
3. $\int_1^3 \frac{x dx}{4x^2 - 5x + 3}$
4. $\int_1^5 \frac{11 dx}{(4 + 16x)\sqrt{x^3}}$
5. $\int_2^5 \frac{17 dx}{(1 + x^2)^{3/2}}$
6. $\int_5^6 \frac{33 dx}{64 - 49 \cos^2 x}$
7. $\int_5^6 \frac{8 dx}{\sin(\frac{3x+3}{8}) \cdot \cos^3(\frac{3x+3}{8})}$
8. $\int_4^6 \frac{4 dx}{\operatorname{tg}(\frac{4x+6}{9}) + 1}$
9. $\int_1^6 21e^{-4x} \cos^2 x dx$
10. $\int_3^8 x \ln(6 + 10x) dx$
11. $\int (4x - 2)^n dx$
12. $\int \frac{8x dx}{(5x - 3)^2}$
13. $\int \frac{2 dx}{x(4x - 3)}$
14. $\int \frac{4 dx}{3x^2 + 18x + 30}$
15. $\int \frac{(5x + 2) dx}{3x^2 - 3x - 126}$
16. $\int \frac{4x^3 dx}{5 + 6x^2}$
17. $\int \frac{(x^2 + 2) dx}{9 - 7x^2}$
18. $\int (4 - 6x)(4 + 4\sqrt{x^3}) dx$
19. $\int \sqrt{\frac{6x - 1}{3x + 2}} dx$
20. $\int \frac{7 dx}{\sqrt{3x^2 - 18x + 102}}$
21. $\int \sqrt{11 - 9x^2} dx$
22. $\int (6x + 5) \cos^2(9x - 4) dx$
23. $\int 6 \sin^3(8x - 5) \cos(8x - 5) dx$
24. $\int \frac{3 dx}{1 + \cos(7x + 7)}$
25. $\int \frac{2 dx}{3 - 3 \cos(2x - 6)}$
26. $\int \frac{4 dx}{\sin^3(3x + 3) \cos^3(3x + 3)}$
27. $\int \frac{9 \cos(3x - 3) dx}{\sin^3(3x - 3)}$
28. $\int \sin(8x - 7) \cos(2x + 4) dx$
29. $\int \operatorname{ctg}^3(7x + 3) dx$
30. $\int \arcsin(3x - 3) dx$
31. $\int (2x^2 - 7x + 6)e^{x-5} dx$
32. $\int x^2 \operatorname{sh}(3x - 4) dx$
33. $\int (2x - 6) \ln(7x + 4) dx$
34. $\int \frac{(3x^2 - 4x - 1) dx}{6x^2 + 84x + 444}$
35. $\int \frac{8 dx}{16x^2 + x^4}$
36. $\int \frac{(2x - 4) dx}{(x^2 - 2x - 8)(x^2 - 0x - 16)}$
37. $\int \sqrt{3x^2 + 12x + 87} dx$
38. $\int \frac{x^2 - 4x + 0}{x^4 - 32x^2 + 256} dx$
39. $\int \frac{(5 - 6x) dx}{8 + \sqrt[3]{x}}$
40. $\int \frac{5x^2 dx}{(3x - 2)^8}$

Вариант 81

1. $\int_1^5 \frac{x dx}{(4 + 4x)^3}$.
2. $\int_3^8 \frac{10 dx}{(5 + 3x)(-3 + 6x)}$.
3. $\int_3^6 \frac{8 dx}{x(16 + x^2)}$.
4. $\int_2^6 \frac{15 dx}{(4 + 9x)\sqrt{x^3}}$.
5. $\int_3^7 \frac{x^2 dx}{\sqrt{25 + x^2}}$.
6. $\int_7^8 \frac{22 dx}{36 + 81 \cos^2 x}$.
7. $\int_5^6 \frac{8 \operatorname{tg}(\frac{6x + 4}{7}) dx}{1 + \cos(\frac{6x + 4}{7})}$.
8. $\int_2^3 \frac{7 \operatorname{tg}(\frac{2x + 3}{6}) dx}{\operatorname{tg}(\frac{2x + 3}{6}) + 1}$.
9. $\int_2^4 17e^{1x} \cos^2 x dx$.
10. $\int_3^5 10 \cos(\ln(7x + 3)) dx$.
11. $\int (5x + 6)^n dx$
12. $\int \frac{6 dx}{(5x + 7)^3}$
13. $\int \frac{2x dx}{(8x - 4)^2}$
14. $\int \frac{2 dx}{5x^2 - 20x + 20}$
15. $\int \frac{(4x + 2) dx}{2x^2 - 28x + 98}$
16. $\int \frac{3x dx}{4 + 9x^2}$
17. $\int \frac{2x dx}{(8 - 9x^2)^2}$
18. $\int \sqrt{x}(4 - 2\sqrt{x}) dx$
19. $\int \sqrt{\frac{6x - 6}{2x - 4}} dx$
20. $\int \frac{5 dx}{\sqrt{3x^2 + 6x + 3}}$
21. $\int \sqrt{5 + 9x^2} dx$
22. $\int 4x^2 \sin(7x + 1) dx$
23. $\int 5 \sin^2(7x - 3) \cos(7x - 3) dx$
24. $\int \frac{9 dx}{\cos(8x - 5)}$
25. $\int 3 \cos(6x + 4) \sqrt{1 + 7 \sin^2(6x + 4)} dx$
26. $\int \frac{2 dx}{\sin^2(3x - 4) \cos^2(3x - 4)}$
27. $\int \frac{4 \cos(3x + 2) dx}{\sin^3(3x + 2)}$
28. $\int \sin(7x + 5) \cos(5x - 1) dx$
29. $\int \operatorname{ctg}^2(3x + 3) dx$
30. $\int x \arccos(5x + 3) dx$
31. $\int \frac{9 dx}{8 + e^{-3x}}$
32. $\int \frac{x dx}{\operatorname{ch}^2(2x - 6)}$
33. $\int \frac{\ln(7x - 4) dx}{63x - 36}$
34. $\int \frac{(3x^2 - 3x - 3) dx}{6x^2 - 18x - 60}$
35. $\int \frac{9 dx}{1x^2 - x^4}$
36. $\int \frac{(5x + 6) dx}{(x^2 + 3x + 2)(x^2 + 8x + 12)}$
37. $\int \sqrt{-2x^2 + 4x + 96} dx$
38. $\int \frac{13x^2 + 5x + 75}{x^4 - 625} dx$
39. $\int \frac{6 dx}{4 - 1x^{2/3}}$
40. $\int 9x(3x - 5)^{10} dx$

Вариант 82

1. $\int_3^8 \frac{x^4 dx}{2 + 9x}$
2. $\int_2^5 \frac{15x dx}{(6 + x)(2 + x)}$
3. $\int_1^4 \frac{6dx}{x^2(9 + x^2)}$
4. $\int_1^3 \frac{15dx}{(9 - 16x)\sqrt{x^3}}$
5. $\int_3^6 \frac{21 dx}{(x^2 - 4)^{3/2}}$
6. $\int_9^{10} \frac{32 dx}{49 - 9 \cos^2 x}$
7. $\int_3^4 \frac{10 dx}{\sin(\frac{7x + 6}{8}) \cdot \cos^3(\frac{7x + 6}{8})}$
8. $\int_0^1 \frac{6 dx}{1 - \operatorname{ctg}(\frac{4x + 5}{6})}$
9. $\int_2^6 \frac{5 dx}{3 + 9e^{-3x}}$
10. $\int_3^6 x \ln(5 + 5x) dx$
11. $\int x(3x - 1)(6x + 1) dx$
12. $\int \frac{4x dx}{(7x + 7)^2}$
13. $\int \frac{2 dx}{x(8x - 5)}$
14. $\int \frac{6 dx}{5x^2 + 10x + 5}$
15. $\int \frac{(3x - 2) dx}{2x^2 + 20x + 50}$
16. $\int \frac{2x^2 dx}{5 + 5x^2}$
17. $\int \frac{(x^2 + 7) dx}{11 - 9x^2}$
18. $\int (6 + 7\sqrt{x})(8 + 2\sqrt{x}) dx$
19. $\int x\sqrt{(2 + 4x)^3} dx$
20. $\int \frac{2 dx}{\sqrt{2x^2 - 18x + 40}}$
21. $\int \frac{5x dx}{\sqrt{4x^2 - 2}}$
22. $\int (7x - 4) \sin^2(2x - 4) dx$
23. $\int 6 \cos^5(9x - 6) dx$
24. $\int \frac{3 dx}{\sin(7x + 4)}$
25. $\int \frac{8 \sin(8x + 7) dx}{\sqrt{1 + 2 \sin^2(8x + 7)}}$
26. $\int \frac{5 dx}{\sin^2(4x - 5) \cos^4(4x - 5)}$
27. $\int \frac{8 \sin^3(7x - 6) dx}{\cos(7x - 6)}$
28. $\int \cos(3x - 1) \cos(8x - 2) dx$
29. $\int \operatorname{tg}^2(6x + 7) dx$
30. $\int \operatorname{arctg}(5x + 1) dx$
31. $\int (2x^2 - 1x + 3)6^{x-3} dx$
32. $\int x^2 \operatorname{ch}(5x + 5) dx$
33. $\int 3x^2 \ln(4x - 7) dx$
34. $\int \frac{(5x^2 + 1x + 3) dx}{5x^2 - 55x + 140}$
35. $\int \frac{2 dx}{125 + x^3}$
36. $\int \frac{(6x - 7) dx}{(x^2 - 2x - 24)(x^2 - 5x - 6)}$
37. $\int \sqrt{-2x^2 - 4x + 96} dx$
38. $\int \frac{3x^2 - 32x + 72}{x^3 - 12x^2 + 36x} dx$
39. $\int \frac{(4 - 1x) dx}{3 + \sqrt[3]{x}}$
40. $\int \frac{3x dx}{(4x + 3)^{10}}$

Вариант 83

1. $\int_2^6 \frac{x^3 dx}{3 + 8x}$
2. $\int_2^8 \frac{15dx}{(3 + 3x)(3 + 7x)}$
3. $\int_2^6 \frac{13x^2 dx}{1 - x^2}$
4. $\int_3^6 \frac{11dx}{(16 - 25x)\sqrt{x^3}}$
5. $\int_1^3 \frac{x^2 dx}{\sqrt{9 + x^2}}$
6. $\int_5^6 \frac{33 dx}{36 - 9 \cos^2 x}$
7. $\int_3^5 \frac{7 dx}{\sin^3\left(\frac{3x + 3}{7}\right) \cdot \cos\left(\frac{3x + 3}{7}\right)}$
8. $\int_6^7 \frac{4 dx}{\operatorname{tg}\left(\frac{4x + 4}{9}\right) - 1}$
9. $\int_0^5 17e^{-4x} \cos^2 x dx$
10. $\int_7^7 x \ln(6 + 6x) dx$
11. $\int_3^3 x^n (5x - 5)^2 dx$
12. $\int \frac{3 dx}{(5x - 7)^2}$
13. $\int \frac{8x^2 dx}{(2x + 4)}$
14. $\int \frac{5 dx}{3x^2 - 30x + 123}$
15. $\int \frac{(3x + 6) dx}{7x^2 - 56x + 287}$
16. $\int \frac{(3x + 5) dx}{9 + 7x^2}$
17. $\int \frac{8x dx}{(10 - 7x^2)^2}$
18. $\int (5 - 6x^{4/9}) dx$
19. $\int \frac{2x dx}{\sqrt{7 - 6x}}$
20. $\int \frac{4 dx}{x\sqrt{-27472x^2 - 19600x + 3}}$
21. $\int \frac{7x dx}{\sqrt{2 - 7x^2}}$
22. $\int 4x^2 \sin(7x - 5) dx$
23. $\int 2 \sin^4(6x - 3) dx$
24. $\int \frac{6 \sin x dx}{1 - \sin(4x + 6)}$
25. $\int \frac{2 dx}{2 - 6 \sin(8x - 2)}$
26. $\int \frac{3 dx}{\sin(8x - 2) \cos(8x - 2)}$
27. $\int \frac{2 \cos^2(4x - 5) dx}{\sin^4(4x - 5)}$
28. $\int \sin(3x - 1) \sin(5x + 2) dx$
29. $\int \operatorname{ctg}^4(5x - 3) dx$
30. $\int x \arcsin(8x + 1) dx$
31. $\int e^{2x} \cos^2(7x + 4) dx$
32. $\int \operatorname{sh}(5x + 4) \operatorname{ch}(5x + 4) dx$
33. $\int 5 \ln(6x + 6) dx$
34. $\int \frac{(3x^2 + 2x - 4) dx}{4x^2 + 48x + 148}$
35. $\int \frac{(6x - 2) dx}{25x^2 + x^4}$
36. $\int \frac{(4x - 3) dx}{(x^2 + 1x - 6)(x^2 - 2x - 15)}$
37. $\int \sqrt{-6x^2 - 48x - 42} dx$
38. $\int \frac{x^2 + 15x + 2}{x^3 - 8} dx$
39. $\int \frac{9 dx}{x\sqrt{8 - 1x}}$
40. $\int 7x(8x + 2)^8 dx$

Вариант 84

1. $\int_1^3 \frac{x^4 dx}{5 + 5x}$.
2. $\int_1^7 \frac{17dx}{x(3 + 3x)^2}$.
3. $\int_3^8 \frac{13x^2 dx}{1 - x^2}$.
4. $\int_2^8 \frac{15dx}{(9 + 36x)\sqrt{x^3}}$.
5. $\int_3^5 \frac{22 dx}{(36 - x^2)^{3/2}}$.
6. $\int_9^{10} \frac{32 dx}{64 - 4 \cos^2 x}$.
7. $\int_{-3}^{-2} \frac{4 \sin(\frac{2x+7}{5}) dx}{\sin(\frac{2x+7}{5}) + \cos(\frac{2x+7}{5})}$.
8. $\int_1^3 9 \operatorname{ctg}^3(\frac{2x+6}{4}) dx$.
9. $\int_0^5 15e^{-1x} \sin^2 x dx$.
10. $\int_2^4 7 \sin(\ln(3x + 10)) dx$.
11. $\int (5x + 5)^n dx$
12. $\int \frac{(3x + 2) dx}{(2x + 5)}$
13. $\int \frac{3 dx}{x^2(2x - 5)}$
14. $\int \frac{3 dx}{5x^2 + 60x + 225}$
15. $\int \frac{(4x - 3) dx}{7x^2 + 7x - 210}$
16. $\int \frac{3x^2 dx}{2 + 3x^2}$
17. $\int \frac{(4x - 4) dx}{7 - 11x^2}$
18. $\int \sqrt{x^3}(3 - 5x) dx$
19. $\int \sqrt{\frac{8x + 7}{5x + 4}} dx$
20. $\int \frac{6 dx}{\sqrt{5x^2 + 70x + 265}}$
21. $\int \frac{2x dx}{\sqrt{11x^2 - 9}}$
22. $\int (7x - 4) \sin(5x - 3) dx$
23. $\int (3x - 3 \sin^2(8x + 2)) dx$
24. $\int \frac{8 \cos x dx}{1 + \cos(6x + 3)}$
25. $\int 8 \sin(2x + 5) \sqrt{1 - 6 \cos^2(2x + 5)} dx$
26. $\int \frac{9 dx}{\sin(8x + 6) \cos(8x + 6)}$
27. $\int \frac{3 \sin(5x + 7) dx}{\cos^3(5x + 7)}$
28. $\int \cos(6x - 6) \cos(2x + 5) dx$
29. $\int \operatorname{ctg}^4(8x + 3) dx$
30. $\int \arccos(6x + 7) dx$
31. $\int e^{2x} \sin(9x + 2) dx$
32. $\int x^2 \operatorname{ch}(5x + 5) dx$
33. $\int (6x + 2) \ln(7x - 3) dx$
34. $\int \frac{(2x^2 - 1x - 3) dx}{6x^2 - 60x + 444}$
35. $\int \frac{7 dx}{36x^2 - x^4}$
36. $\int \frac{(6x + 7) dx}{(x^2 + 11x + 28)(x^2 + 1x - 42)}$
37. $\int \sqrt{2x^2 + 6x - 20} dx$
38. $\int \frac{4x^2 - 9x - 20}{x^4 - 8x^2 + 16} dx$
39. $\int \frac{(7 - 1x) dx}{6 + \sqrt{x}}$
40. $\int \frac{5x^2 dx}{(3x - 2)^8}$

Вариант 85

1. $\int_3^8 \frac{x dx}{(7+2x)^2}$.
2. $\int_3^8 \frac{17 dx}{(5+6x)(5+7x)}$.
3. $\int_3^9 \frac{x dx}{2x^2+4x-1}$.
4. $\int_3^8 \frac{15 dx}{\sqrt{3+2x}\sqrt{15+3x}}$.
5. $\int_4^{10} \frac{x^2 dx}{\sqrt{x^2-9}}$.
6. $\int_7^8 \frac{30 dx}{81-4\cos^2 x}$.
7. $\int_1^2 \frac{5\cos(\frac{3x+7}{11}) dx}{\sin(\frac{3x+7}{11}) - \cos(\frac{3x+7}{11})}$.
8. $\int_4^6 \frac{4 dx}{\operatorname{tg}(\frac{4x+6}{9}) + 1}$.
9. $\int_3^9 \frac{7 dx}{7+7e^{-6x}}$.
10. $\int_3^9 \frac{\ln(4+3x) dx}{x^2}$.
11. $\int (4x-6)^n dx$
12. $\int \frac{5x dx}{(6x-3)^3}$
13. $\int \frac{3 dx}{x(8x-1)}$
14. $\int \frac{4 dx}{2x^2-12x+50}$
15. $\int \frac{(2x-4) dx}{6x^2-60x+174}$
16. $\int \frac{(x^2+4) dx}{11+3x^2}$
17. $\int \frac{4x dx}{5-3x^2}$
18. $\int \frac{6 dx}{(6-2x)^{8/6}}$
19. $\int \sqrt{(7+3x)^3} dx$
20. $\int \frac{4 dx}{\sqrt{4x^2+16x+16}}$
21. $\int \frac{6x dx}{\sqrt{5-11x^2}}$
22. $\int (7x-1) \sin^2(4x-3) dx$
23. $\int 7 \cos^4(4x+1) dx$
24. $\int \frac{5 \sin x dx}{1+\sin(7x+1)}$
25. $\int 9 \cos(4x+5) \sqrt{1+5 \sin^2(4x+5)} dx$
26. $\int \frac{6 dx}{\sin^2(8x+7) \cos(8x+7)}$
27. $\int \frac{5 \sin(8x-3) dx}{\cos^2(8x-3)}$
28. $\int \cos(3x-2) \cos(2x-2) dx$
29. $\int \operatorname{tg}^3(3x-3) dx$
30. $\int x \operatorname{arctg}(3x-1) dx$
31. $\int (3x^2-7x+6)e^{x+6} dx$
32. $\int \frac{x dx}{\operatorname{ch}^2(5x+4)}$
33. $\int 8 \ln(4x+7) dx$
34. $\int \frac{(2x^2+6x+5) dx}{2x^2-28x+116}$
35. $\int \frac{(4x-1) dx}{36x^2+x^4}$
36. $\int \frac{(3x+5) dx}{(x^2+6x-7)(x^2-5x+4)}$
37. $\int \sqrt{2x^2-12x+50} dx$
38. $\int \frac{5x^2-9x-150}{x^4-25x^2} dx$
39. $\int \frac{4x^{7/2}-5x^{4/3}+8}{\sqrt{x}} dx$
40. $\int \frac{7x^2 dx}{(8x-5)^5}$

Вариант 86

1. $\int_1^5 \frac{x^3 dx}{4 + 7x}$.
2. $\int_1^3 \frac{17x dx}{(7 + x)(2 + x)}$.
3. $\int_3^6 \frac{14x^2 dx}{1 - x^2}$.
4. $\int_2^6 \frac{12\sqrt{x} dx}{4 - 4x}$.
5. $\int_1^4 \frac{16 dx}{(25 + x^2)^{3/2}}$.
6. $\int_7^8 \frac{21 dx}{81 - 25 \sin^2 x}$.
7. $\int_{-1}^0 \frac{11 \operatorname{ctg}\left(\frac{2x + 7}{10}\right) dx}{1 - \sin\left(\frac{2x + 7}{10}\right)}$.
8. $\int_3^4 \frac{2 dx}{1 + \operatorname{ctg}\left(\frac{6x + 5}{8}\right)}$.
9. $\int_2^3 16e^{-1x} \cos^2 x dx$.
10. $\int_3^7 5 \cos(\ln(3x + 9)) dx$.
11. $\int_3^7 (3x - 5)^2 (4x + 1)^2 dx$
12. $\int \frac{4 dx}{(5x - 2)^3}$
13. $\int \frac{6 dx}{x(7x + 2)}$
14. $\int \frac{7 dx}{5x^2 + 20x + 20}$
15. $\int \frac{(3x + 6) dx}{7x^2 - 56x + 287}$
16. $\int \frac{(5x - 4) dx}{4 + 10x^2}$
17. $\int \frac{2x^2 dx}{6 - 4x^2}$

18. $\int (8 + 3x^{7/4}) dx$
19. $\int \sqrt{\frac{3x + 5}{5x - 5}} dx$
20. $\int \frac{6 dx}{\sqrt{4x^2 + 32x + 64}}$
21. $\int \sqrt{11 + 10x^2} dx$
22. $\int 3x^2 \cos(9x - 4) dx$
23. $\int 6 \sin^3(8x - 5) \cos(8x - 5) dx$
24. $\int \frac{3x dx}{1 + \sin(5x - 7)}$
25. $\int 6 \sin(8x + 5) \sqrt{1 - 5 \cos^2(8x + 5)} dx$
26. $\int \frac{4 dx}{\sin^3(3x + 3) \cos^3(3x + 3)}$
27. $\int \frac{6 \sin^3(3x + 4) dx}{\cos(3x + 4)}$
28. $\int \sin(7x + 3) \sin(6x - 4) dx$
29. $\int \operatorname{ctg}^2(3x + 7) dx$
30. $\int x \arccos(6x + 6) dx$
31. $\int e^{3x} \cos^2(4x - 6) dx$
32. $\int x \operatorname{sh}(6x - 5) dx$
33. $\int 5x^2 \ln(2x - 7) dx$
34. $\int \frac{(2x^2 + 6x - 3) dx}{2x^2 - 10x - 28}$
35. $\int \frac{8 dx}{216 - x^3}$
36. $\int \frac{(3x + 1) dx}{(x^2 - 8x + 12)(x^2 - 6x + 8)}$
37. $\int \sqrt{2x^2 + 28x + 170} dx$
38. $\int \frac{4x^2 + 1x - 50}{x^4 - 25x^2} dx$
39. $\int \frac{7 dx}{6 - 3x^{3/6}}$
40. $\int \frac{6x dx}{(3x + 4)^7}$

Вариант 87

1. $\int_3^5 \frac{x^2 dx}{(5+6x)^2}$.
2. $\int_1^6 \frac{12x dx}{(5+x)(4+x)}$.
3. $\int_2^5 \frac{x dx}{4x^2 - 3x - 2}$.
4. $\int_3^7 \frac{16\sqrt{x} dx}{16 - 36x}$.
5. $\int_3^9 \frac{x^2 dx}{\sqrt{225 - x^2}}$.
6. $\int_2^3 \frac{31 dx}{49 - 25 \cos^2 x}$.
7. $\int_2^3 \frac{5 dx}{\sin(\frac{3x+2}{5}) \cdot \cos^2(\frac{3x+2}{5})}$.
8. $\int_3^4 \frac{9 \operatorname{tg}(\frac{2x+4}{9}) dx}{\operatorname{tg}(\frac{2x+4}{9}) - 1}$.
9. $\int_2^6 15e^{-4x} \sin^2 x dx$.
10. $\int_1^4 x \ln(5+3x) dx$.
11. $\int_1^4 (3x-5)^2(4x+1)^2 dx$.
12. $\int \frac{4x dx}{(7x+7)^2}$.
13. $\int \frac{4 dx}{x(5x-2)}$.
14. $\int \frac{4 dx}{2x^2 - 12x + 50}$.
15. $\int \frac{(4x-1) dx}{5x^2 + 10x + 5}$.
16. $\int \frac{(2x+4) dx}{6+2x^2}$.
17. $\int \frac{(6x^2+4) dx}{11-3x^2}$.
18. $\int (8+2x)(8+5\sqrt{x^3}) dx$.
19. $\int \sqrt{(7+4x)^3} dx$.
20. $\int \frac{2 dx}{\sqrt{4x^2+8x+4}}$.
21. $\int \frac{8x dx}{\sqrt{10+5x^2}}$.
22. $\int 5x^2 \sin(7x+4) dx$.
23. $\int (5x+2 \cos^2(6x+2)) dx$.
24. $\int \frac{4 dx}{1+\cos(5x+2)}$.
25. $\int \frac{2 \sin(6x-5) dx}{\sqrt{1+5 \sin^2(6x-5)}}$.
26. $\int \frac{4 dx}{\sin^2(8x-3) \cos^4(8x-3)}$.
27. $\int \frac{5 \sin(7x-6) dx}{\cos^2(7x-6)}$.
28. $\int \cos(5x-6) \cos(8x+4) dx$.
29. $\int \operatorname{tg}^2(2x-5) dx$.
30. $\int \arccos(5x-2) dx$.
31. $\int \frac{4 dx}{1+e^{2x+6}}$.
32. $\int \operatorname{sh}(2x-4) \operatorname{ch}^2(2x-4) dx$.
33. $\int \frac{\ln(2x-6) dx}{14x-42}$.
34. $\int \frac{(5x^2-1x-0) dx}{5x^2-30x+45}$.
35. $\int \frac{7 dx}{8+x^3}$.
36. $\int \frac{(4x+6) dx}{(x^2-2x-3)(x^2-1x-2)}$.
37. $\int \sqrt{-7x^2-70x+168} dx$.
38. $\int \frac{5x^2-8x+10}{x^4-2x^3} dx$.
39. $\int \frac{8x^{7/2}-5x^{2/3}+6}{\sqrt{x}} dx$.
40. $\int \frac{9x^2 dx}{(4x-5)^7}$.

Вариант 88

1. $\int_1^3 \frac{x^2 dx}{(4+5x)^2}$.
2. $\int_2^6 \frac{18dx}{x(7-3x)}$.
3. $\int_1^6 \frac{x dx}{2x^2+6x+3}$.
4. $\int_1^3 \frac{16 dx}{\sqrt{3+3x}\sqrt{13-4x}}$.
5. $\int_2^5 \frac{x^3 dx}{\sqrt{x^2-1}}$.
6. $\int_9^{10} \frac{30 dx}{81-64 \cos^2 x}$.
7. $\int_2^3 \frac{7 \cos(\frac{5x+5}{11}) dx}{\sin(\frac{5x+5}{11}) + \cos(\frac{5x+5}{11})}$.
8. $\int_3^5 \frac{2 \operatorname{tg}(\frac{2x+3}{7}) dx}{\operatorname{tg}(\frac{2x+3}{7}) + 1}$.
9. $\int_0^1 21e^{-1x} \sin^2 x dx$.
10. $\int_2^4 5 \cos(\ln(6x+6)) dx$.
11. $\int x^n (5x-5)^2 dx$
12. $\int \frac{7x dx}{(3x+4)^2}$
13. $\int \frac{2 dx}{x(7x+7)}$
14. $\int \frac{3 dx}{3x^2-24x+123}$
15. $\int \frac{(5x+6) dx}{3x^2+27x+42}$
16. $\int \frac{(5x+3) dx}{10+5x^2}$
17. $\int \frac{(x^2+7) dx}{2-3x^2}$
18. $\int (7-3\sqrt{x})(7-1\sqrt{x^3}) dx$
19. $\int \frac{2 dx}{\sqrt{5x+1}}$
20. $\int \frac{7 dx}{\sqrt{5x^2-5x-60}}$
21. $\int \frac{8x dx}{\sqrt{7x^2-10}}$
22. $\int (8x+3) \sin(4x+6) dx$
23. $\int 3 \sin(5x-2) \cos^3(5x-2) dx$
24. $\int \frac{4 dx}{\sin(3x-7)}$
25. $\int 4 \sin(8x+7) \sqrt{1-2 \cos^2(8x+7)} dx$
26. $\int \frac{6 dx}{\sin(3x+1) \cos^2(3x+1)}$
27. $\int \frac{3 \sin^3(7x+4) dx}{\cos(7x+4)}$
28. $\int \sin(5x+7) \cos(3x-1) dx$
29. $\int \operatorname{ctg}^4(8x+3) dx$
30. $\int x \arcsin(6x-1) dx$
31. $\int e^{2x} \cos(9x+2) dx$
32. $\int \operatorname{sh}(8x-2) \operatorname{ch}(8x-2) dx$
33. $\int \frac{\ln(8x+7) dx}{(8x+7)^2}$
34. $\int \frac{(4x^2-5x+3) dx}{3x^2-12x+87}$
35. $\int \frac{(7x-2) dx}{9x^2-x^4}$
36. $\int \frac{(2x-7) dx}{(x^2+7x+10)(x^2-0x-4)}$
37. $\int \sqrt{4x^2-56x+296} dx$
38. $\int \frac{5x^2-10x+2}{x^4-2x^3} dx$
39. $\int \frac{9 dx}{4+3x^{4/2}}$
40. $\int 7x(2x-7)^6 dx$

Вариант 89

1. $\int_2^7 \frac{x^4 dx}{4 + 10x}$.
2. $\int_2^4 \frac{14dx}{x(3 - 6x)^2}$.
3. $\int_3^9 \frac{6dx}{x^2(25 + x^2)}$.
4. $\int_1^7 \frac{9 dx}{x\sqrt{2 + 4x}}$.
5. $\int_2^4 \frac{x^3 dx}{\sqrt{4 + x^2}}$.
6. $\int_2^3 \frac{21 dx}{25 + 9 \cos^2 x}$.
7. $\int_4^5 \frac{9 \sin(\frac{5x + 7}{10}) dx}{\sin(\frac{5x + 7}{10}) - \cos(\frac{5x + 7}{10})}$.
8. $\int_4^6 \frac{7 dx}{1 - \operatorname{ctg}(\frac{2x + 4}{9})}$.
9. $\int_0^1 20e^{-2x} \sin^2 x dx$.
10. $\int_3^4 3 \sin(\ln(6x + 7)) dx$.
11. $\int x(3x + 2)(2x - 2) dx$
12. $\int \frac{3x dx}{(7x - 1)}$
13. $\int \frac{2x dx}{(3x + 4)^2}$
14. $\int \frac{2 dx}{7x^2 + 14x + 259}$
15. $\int \frac{(4x - 1) dx}{5x^2 + 10x + 5}$
16. $\int \frac{5x dx}{3 + 9x^2}$
17. $\int \frac{(x^2 + 3) dx}{7 - 8x^2}$
18. $\int \frac{4 dx}{(4 - 7x)^{9/3}}$
19. $\int \frac{\sqrt{7x + 1} dx}{7 dx}$
20. $\int \frac{7 dx}{x\sqrt{1160x^2 + 280x + 3}}$
21. $\int \sqrt{10x^2 - 7} dx$
22. $\int (8x + 3) \sin(4x + 6) dx$
23. $\int 3 \sin(5x - 2) \cos^3(5x - 2) dx$
24. $\int \frac{3 dx}{1 + \sin(7x - 4)}$
25. $\int 9 \sin(3x + 6) \sqrt{1 - 2 \cos^2(3x + 6)} dx$
26. $\int \frac{8 dx}{\sin^4(6x + 6) \cos^2(6x + 6)}$
27. $\int \frac{5 \sin(7x - 4) dx}{\cos^3(7x - 4)}$
28. $\int \cos(6x + 2) \cos(7x - 1) dx$
29. $\int \operatorname{tg}^2(3x - 4) dx$
30. $\int \arccos(7x - 5) dx$
31. $\int e^{6x} \cos(2x + 6) dx$
32. $\int x \operatorname{sh}(6x - 6) dx$
33. $\int 4x^3 \ln(6x + 1) dx$
34. $\int \frac{(3x^2 - 4x - 3) dx}{2x^2 - 28x + 98}$
35. $\int \frac{(8x + 3) dx}{36x^2 + x^4}$
36. $\int \frac{(5x + 4) dx}{(x^2 + 10x + 24)(x^2 + 2x - 8)}$
37. $\int \sqrt{-2x^2 - 4x + 30} dx$
38. $\int \frac{11x^2 - 47x - 3}{x^4 - 8x^3} dx$
39. $\int \frac{(4 - 2x) dx}{5 + \sqrt[3]{x}}$
40. $\int 3x^2(7x + 6)^5 dx$

Вариант 90

1. $\int_3^7 \frac{x^2 dx}{(3+2x)^2}$.
2. $\int_2^5 \frac{15x dx}{(6+x)(2+x)}$.
3. $\int_2^7 \frac{9dx}{x(36+x^2)}$.
4. $\int_3^9 \frac{16dx}{(1+9x)\sqrt{x^3}}$.
5. $\int_1^7 \frac{17 dx}{(100-x^2)^{3/2}}$.
6. $\int_2^3 \frac{22 dx}{25+4\sin^2 x}$.
7. $\int_3^4 \frac{7 dx}{\sin^3(\frac{5x+4}{4}) \cdot \cos(\frac{5x+4}{4})}$.
8. $\int_3^5 6 \operatorname{ctg}^4(\frac{3x+2}{7}) dx$.
9. $\int_0^2 21e^{-3x} \sin^2 x dx$.
10. $\int_1^2 10 \cos(\ln(5x+8)) dx$.
11. $\int_1^4 (4x-1)^2(5x-3)^2 dx$
12. $\int \frac{7x dx}{(3x+4)^2}$
13. $\int \frac{2x dx}{(8x-4)^2}$
14. $\int \frac{7 dx}{7x^2+42x+126}$
15. $\int \frac{(6x+3) dx}{5x^2-20x+65}$
16. $\int \frac{(4x+2) dx}{3+9x^2}$
17. $\int \frac{3x^2 dx}{10-8x^2}$
18. $\int (7-6x)(2+3\sqrt{x^3}) dx$
19. $\int \sqrt{\frac{3x-6}{5x+4}} dx$
20. $\int \frac{4 dx}{x\sqrt{-26192x^2+7056x+2}}$
21. $\int \frac{8x dx}{\sqrt{3x^2+4}}$
22. $\int (8x-2) \sin(5x+4) dx$
23. $\int 3 \sin^4(7x+6) dx$
24. $\int \frac{8 dx}{1-\cos(2x+5)}$
25. $\int \frac{7 dx}{5+7\cos(3x-1)}$
26. $\int \frac{5 dx}{\sin^3(4x-4) \cos^3(4x-4)}$
27. $\int \frac{9 \sin(6x-5) dx}{\cos^2(6x-5)}$
28. $\int \sin(4x-3) \cos(9x-5) dx$
29. $\int \operatorname{ctg}^3(4x+6) dx$
30. $\int x \operatorname{arctg}(6x-7) dx$
31. $\int e^{6x} \cos(2x+6) dx$
32. $\int \operatorname{sh}(3x-6) \operatorname{ch}^2(3x-6) dx$
33. $\int (2x-6) \ln(7x+4) dx$
34. $\int \frac{(3x^2-1x+3) dx}{4x^2+12x+8}$
35. $\int \frac{6 dx}{16-x^4}$
36. $\int \frac{(6x+2) dx}{(x^2-3x+2)(x^2-6x+8)}$
37. $\int \sqrt{-5x^2-20x+25} dx$
38. $\int \frac{11x^2+1x-48}{x^4-8x^2+16} dx$
39. $\int \frac{6x^{7/2}+5x^{2/3}+8}{\sqrt{x}}$
40. $\int \frac{6x^2 dx}{(7x+7)^8}$

Вариант 91

1. $\int_3^5 \frac{x^2 dx}{(5+6x)^2}$.
2. $\int_1^6 \frac{15dx}{x(7+3x)}$.
3. $\int_3^8 \frac{9dx}{x^2(25+x^2)}$.
4. $\int_1^6 \frac{15 dx}{\sqrt{4+5x}\sqrt{10+2x}}$.
5. $\int_3^7 \frac{x^2 dx}{\sqrt{25+x^2}}$.
6. $\int_5^6 \frac{24 dx}{100+16 \cos^2 x}$.
7. $\int_1^2 \frac{6 \cos(\frac{5x+7}{9}) dx}{\sin(\frac{5x+7}{9}) + \cos(\frac{5x+7}{9})}$.
8. $\int_3^4 \frac{9 dx}{\operatorname{tg}(\frac{3x+2}{7}) + 1}$.
9. $\int_1^4 15e^{-1x} \sin^2 x dx$.
10. $\int_3^7 x \ln(3+8x) dx$.
11. $\int (6x+5)^2(7x-2)^2 dx$
12. $\int \frac{8x dx}{(5x-3)^2}$
13. $\int \frac{4 dx}{x(6x-7)}$
14. $\int \frac{2 dx}{5x^2-50x+205}$
15. $\int \frac{(6x+7) dx}{3x^2+6x+3}$
16. $\int \frac{(4x+2) dx}{3+9x^2}$
17. $\int \frac{(9x^2+2) dx}{4-9x^2}$
18. $\int \frac{4 dx}{(6-6x)^{7/4}}$
19. $\int \frac{\sqrt{2+5x} dx}{6 dx}$
20. $\int \frac{6 dx}{\sqrt{7x^2-7x-210}}$
21. $\int \sqrt{8x^2+10} dx$
22. $\int (4x+1) \cos^2(2x-3) dx$
23. $\int 7 \sin(6x-6) \cos^3(6x-6) dx$
24. $\int \frac{3 dx}{1+\sin(6x+3)}$
25. $\int 9 \sin(7x+5) \sqrt{1+2 \cos^2(7x+5)} dx$
26. $\int \frac{5 dx}{\sin(3x+6) \cos(3x+6)}$
27. $\int \frac{2 \cos^2(4x-5) dx}{\sin^4(4x-5)}$
28. $\int \sin(7x+6) \sin(6x+5) dx$
29. $\int \operatorname{ctg}^3(4x+3) dx$
30. $\int x \operatorname{arctg}(8x+6) dx$
31. $\int (5x^2-1x+9)5^{x-2} dx$
32. $\int x^2 \operatorname{ch}(2x-2) dx$
33. $\int 2x^2 \ln(8x-1) dx$
34. $\int \frac{(3x^2-1x+3) dx}{4x^2+12x+8}$
35. $\int \frac{7 dx}{64-x^3}$
36. $\int \frac{(5x+4) dx}{(x^2-1x-30)(x^2-2x-35)}$
37. $\int \sqrt{6x^2+6x-12} dx$
38. $\int \frac{3x^2+12x-75}{x^4-625} dx$
39. $\int \frac{8 dx}{5-1x^{7/5}}$
40. $\int \frac{7x^2 dx}{(8x-5)^5}$

Вариант 92

1. $\int_3^9 \frac{x^4 dx}{3 + 10x}$
2. $\int_2^7 \frac{21 dx}{x(4 - 6x)^2}$
3. $\int_2^5 \frac{x dx}{4x^2 - 5x + 4}$
4. $\int_2^4 \frac{15x^2 dx}{\sqrt{-2 + 5x}}$
5. $\int_3^7 \frac{21 dx}{(x^2 - 1)^{3/2}}$
6. $\int_2^3 \frac{22 dx}{25 + 4 \sin^2 x}$
7. $\int_2^3 \frac{8 \operatorname{ctg}\left(\frac{4x + 5}{8}\right) dx}{1 + \sin\left(\frac{4x + 5}{8}\right)}$
8. $\int_3^4 \frac{9 dx}{\operatorname{tg}\left(\frac{3x + 2}{7}\right) + 1}$
9. $\int_2^6 \frac{7 dx}{5 + 6e^{-3x}}$
10. $\int_1^7 \frac{\ln(6 + 5x) dx}{x^2}$
11. $\int (5x - 1)(6x - 3) dx$
12. $\int \frac{7 dx}{(4x - 1)^3}$
13. $\int \frac{4 dx}{x(3x - 2)}$
14. $\int \frac{6 dx}{3x^2 + 18x - 21}$
15. $\int \frac{(2x + 6) dx}{3x^2 + 3x - 60}$
16. $\int \frac{8x dx}{(7 + 9x^2)^2}$
17. $\int \frac{8x^2 dx}{9 - 11x^2}$
18. $\int \sqrt{x^3}(6 - 2x) dx$
19. $\int x \sqrt{6 + 5x} dx$
20. $\int \frac{7 dx}{x \sqrt{1296x^2 - 432x + 6}}$
21. $\int \sqrt{10 + 4x^2} dx$
22. $\int (2x + 1) \cos^2(3x - 1) dx$
23. $\int \left(7x + 7 \sin^2(2x - 6)\right) dx$
24. $\int \frac{6 \sin x dx}{1 - \sin(4x + 6)}$
25. $\int \frac{5 dx}{5 + 3 \sin^2(6x + 1)}$
26. $\int \frac{8 dx}{\sin^4(3x + 7) \cos^2(3x + 7)}$
27. $\int \frac{4 \sin^3(2x - 3) dx}{\cos(2x - 3)}$
28. $\int \cos(8x - 3) \cos(7x + 5) dx$
29. $\int \operatorname{ctg}^3(7x + 3) dx$
30. $\int \arccos(6x - 2) dx$
31. $\int e^{5x} \sin(4x - 4) dx$
32. $\int x \operatorname{ch}(7x + 4) dx$
33. $\int 7x^3 \ln(3x - 6) dx$
34. $\int \frac{(6x^2 + 1x - 4) dx}{3x^2 + 3x - 6}$
35. $\int \frac{3 dx}{216 + x^3}$
36. $\int \frac{(5x - 2) dx}{(x^2 + 8x + 7)(x^2 - 6x - 7)}$
37. $\int \sqrt{-6x^2 - 48x - 42} dx$
38. $\int \frac{3x^2 + 1x - 16}{x^4 + 16x^2} dx$
39. $\int \frac{5 dx}{8 - 3x^{5/6}}$
40. $\int \frac{2x^2 dx}{(3x - 4)^{11}}$

Вариант 93

1. $\int_3^7 \frac{x^2 dx}{(3+2x)^2}$.
2. $\int_3^5 \frac{16dx}{(5+5x)(5+4x)}$.
3. $\int_1^5 \frac{6dx}{x(36+x^2)}$.
4. $\int_3^7 \frac{15x dx}{\sqrt{-1+4x}}$.
5. $\int_1^4 \frac{x^2 dx}{\sqrt{144-x^2}}$.
6. $\int_2^3 \frac{21 dx}{100-25 \sin^2 x}$.
7. $\int_{11}^{13} \frac{10 dx}{\sin^2(\frac{5x+5}{9}) \cdot \cos(\frac{5x+5}{9})}$.
8. $\int_2^3 \frac{2 \operatorname{tg}(\frac{3x+3}{8}) dx}{\operatorname{tg}(\frac{3x+3}{8}) - 1}$.
9. $\int_3^9 \frac{7 dx}{7+6e^{-3x}}$.
10. $\int_1^5 x^3 \ln(9+x^2) dx$.
11. $\int x(2x+3)(5x+2) dx$
12. $\int \frac{(6x+4) dx}{(3x-7)}$
13. $\int \frac{dx}{(2x+2)(6x-2)}$
14. $\int \frac{7 dx}{4x^2-24x+36}$
15. $\int \frac{(3x-1) dx}{7x^2-14x-21}$
16. $\int \frac{(8x-6) dx}{10+6x^2}$
17. $\int \frac{(7x-4) dx}{6-2x^2}$
18. $\int \frac{2 dx}{(4+5x)^{7/3}}$
19. $\int \frac{2x dx}{\sqrt{7-6x}}$
20. $\int \frac{6 dx}{x\sqrt{7280x^2-1120x+5}}$
21. $\int \frac{3x dx}{\sqrt{6+7x^2}}$
22. $\int (4x+1) \cos^2(2x-3) dx$
23. $\int 8 \sin^3(9x-6) dx$
24. $\int \frac{9 \cos x dx}{1+\cos(6x+2)}$
25. $\int 2 \sin(6x-7) \sqrt{1+4 \cos^2(6x-7)} dx$
26. $\int \frac{4 dx}{\sin^2(8x+1) \cos^2(8x+1)}$
27. $\int \frac{5 \cos(6x+6) dx}{\sin^3(6x+6)}$
28. $\int \sin(8x-2) \cos(5x-2) dx$
29. $\int \operatorname{tg}^3(5x-2) dx$
30. $\int x \arcsin(6x-1) dx$
31. $\int \frac{8 dx}{1+e^{6x+6}}$
32. $\int \operatorname{sh}^2(3x-4) \operatorname{ch}(3x-4) dx$
33. $\int (6x+2) \ln(7x-3) dx$
34. $\int \frac{(5x^2+2x-5) dx}{7x^2+70x+175}$
35. $\int \frac{8 dx}{16x^2+x^4}$
36. $\int \frac{(5x+4) dx}{(x^2+10x+24)(x^2+2x-8)}$
37. $\int \sqrt{2x^2+28x+170} dx$
38. $\int \frac{7x^2+0x-21}{x^4-5x^3} dx$
39. $\int \frac{5 dx}{x\sqrt{4+3x}}$
40. $\int \frac{5x^2 dx}{(4x+2)^7}$

Вариант 94

1. $\int_1^6 \frac{x^2 dx}{(3 - 6x)^2}$.
2. $\int_2^5 \frac{22dx}{x^2(5 + 2x)}$.
3. $\int_1^6 \frac{11dx}{x(49 + x^2)}$.
4. $\int_1^3 \frac{11 dx}{x\sqrt{3 + 2x}}$.
5. $\int_2^5 \frac{x^2 dx}{\sqrt{36 - x^2}}$.
6. $\int_5^6 \frac{23 dx}{36 + 25 \sin^2 x}$.
7. $\int_1^2 \frac{6 \cos(\frac{5x + 7}{9}) dx}{\sin(\frac{5x + 7}{9}) + \cos(\frac{5x + 7}{9})}$.
8. $\int_4^5 \frac{2 \operatorname{tg}(\frac{6x + 2}{9}) dx}{\operatorname{tg}(\frac{6x + 2}{9}) + 1}$.
9. $\int_2^4 \frac{4 dx}{4 + 5e^{-5x}}$.
10. $\int_3^9 \frac{\ln(4 + 3x) dx}{x^2}$.
11. $\int x^n (7x - 5)^2 dx$
12. $\int \frac{3 dx}{(5x - 7)^2}$
13. $\int \frac{3x^2 dx}{(7x - 4)}$
14. $\int \frac{4 dx}{5x^2 - 15x - 90}$
15. $\int \frac{(5x - 1) dx}{3x^2 + 6x + 15}$
16. $\int \frac{(x^2 + 8) dx}{5 + 5x^2}$
17. $\int \frac{3x^3 dx}{9 - 11x^2}$
18. $\int \frac{6 dx}{(6 - 2x)^{8/6}}$
19. $\int \frac{\sqrt{(2 + 6x)^3} dx}{5 dx}$
20. $\int \frac{5 dx}{x\sqrt{-6240x^2 + 2400x + 7}}$
21. $\int \frac{5x dx}{\sqrt{8x^2 + 8}}$
22. $\int 2x^2 \cos(7x + 4) dx$
23. $\int 6 \sin^2(7x - 5) \cos^2(7x - 5) dx$
24. $\int \frac{6x dx}{1 - \sin(7x - 7)}$
25. $\int \frac{7 \sin(7x + 5) dx}{\sqrt{1 + 2 \sin^2(7x + 5)}}$
26. $\int \frac{4 dx}{\sin^3(5x + 6) \cos^3(5x + 6)}$
27. $\int \frac{7 \cos^2(5x - 2) dx}{\sin(5x - 2)}$
28. $\int \cos(7x - 3) \cos(6x - 6) dx$
29. $\int \operatorname{ctg}^3(4x - 6) dx$
30. $\int x \arcsin(3x + 1) dx$
31. $\int e^{7x} \cos^2(8x - 3) dx$
32. $\int \frac{x dx}{\operatorname{ch}^2(5x + 4)}$
33. $\int 7 \ln^2(5x - 2) dx$
34. $\int \frac{(5x^2 - 2x + 6) dx}{7x^2 - 70x + 238}$
35. $\int \frac{9 dx}{125 - x^3}$
36. $\int \frac{(6x - 6) dx}{(x^2 + 1x - 12)(x^2 - 1x - 6)}$
37. $\int \sqrt{-2x^2 - 4x + 96} dx$
38. $\int \frac{0x^2 + 8x + 16}{x^3 - 64} dx$
39. $\int \frac{(4 + 1x) dx}{8 + \sqrt[3]{x}}$
40. $\int 4x^2(2x + 7)^7 dx$

Вариант 95

1. $\int_3^9 \frac{x^4 dx}{4 + 5x}$

2. $\int_2^7 \frac{15dx}{x^2(7 + 2x)}$

3. $\int_3^7 \frac{12x^2 dx}{4 - x^2}$

4. $\int_3^7 \frac{7x^2 dx}{\sqrt{-4 + 4x}}$

5. $\int_4^8 \frac{x^2 dx}{\sqrt{x^2 - 9}}$

6. $\int_5^6 \frac{23 dx}{36 + 25 \sin^2 x}$

7. $\int_0^1 \frac{9 \operatorname{tg}\left(\frac{6x + 5}{9}\right) dx}{1 + \cos\left(\frac{6x + 5}{9}\right)}$

8. $\int_1^2 \frac{6 dx}{\operatorname{tg}\left(\frac{3x + 5}{3}\right) + 1}$

9. $\int_2^7 19e^{-4x} \cos^2 x dx$

10. $\int_3^6 x \ln(5 + 5x) dx$

11. $\int (7x + 2)^n dx$

12. $\int \frac{7 dx}{(4x - 1)^3}$

13. $\int \frac{2 dx}{x(7x + 7)}$

14. $\int \frac{2 dx}{3x^2 - 6x - 105}$

15. $\int \frac{(2x - 1) dx}{7x^2 + 98x + 455}$

16. $\int \frac{6x^3 dx}{8 + 9x^2}$

17. $\int \frac{7x^3 dx}{6 - 7x^2}$

18. $\int \frac{3 dx}{(7 - 4x)^{3/9}}$

19. $\int \sqrt{\frac{8x - 3}{2x + 4}} dx$

20. $\int \frac{3 dx}{x\sqrt{-294x^2 + 84x + 3}}$

21. $\int \sqrt{10x^2 + 9} dx$

22. $\int 4x^2 \sin(7x + 1) dx$

23. $\int 6 \cos^5(9x - 6) dx$

24. $\int \frac{8x dx}{1 + \sin(4x - 5)}$

25. $\int \frac{7 \sin(7x + 5) dx}{\sqrt{1 + 2 \sin^2(7x + 5)}}$

26. $\int \frac{2 dx}{\sin^3(3x - 4) \cos^3(3x - 4)}$

27. $\int \frac{7 \sin^2(2x - 5) dx}{\cos^4(2x - 5)}$

28. $\int \cos(2x - 7) \cos(9x - 6) dx$

29. $\int \operatorname{tg}^2(5x + 1) dx$

30. $\int \operatorname{arctg}(8x - 1) dx$

31. $\int e^{3x} \sin^2(7x - 6) dx$

32. $\int x \operatorname{sh}(8x - 3) dx$

33. $\int 9x^3 \ln(8x - 6) dx$

34. $\int \frac{(2x^2 - 3x + 6) dx}{4x^2 - 32x + 28}$

35. $\int \frac{4 dx}{25x^2 - x^4}$

36. $\int \frac{(5x + 4) dx}{(x^2 - 12x + 35)(x^2 - 3x - 10)}$

37. $\int \sqrt{6x^2 - 60x + 204} dx$

38. $\int \frac{2x^2 - 9x + 19}{x^4 - 7x^3} dx$

39. $\int \frac{(5 - 2x) dx}{9 + \sqrt[3]{x}}$

40. $\int \frac{5x^2 dx}{(8x - 2)^6}$

Вариант 96

1. $\int_3^6 \frac{x^2 dx}{(7-5x)^2}$.
2. $\int_1^6 \frac{15dx}{x(7+3x)}$.
3. $\int_3^8 \frac{14x^2 dx}{4-x^2}$.
4. $\int_1^3 \frac{8\sqrt{x} dx}{1-9x}$.
5. $\int_1^3 \frac{x^2 dx}{\sqrt{144-x^2}}$.
6. $\int_9^{10} \frac{35 dx}{49-36 \cos^2 x}$.
7. $\int_2^3 \frac{11 \cos(\frac{5x+7}{10}) dx}{\sin(\frac{5x+7}{10}) + \cos(\frac{5x+7}{10})}$.
8. $\int_1^2 \frac{9 \operatorname{tg}(\frac{2x+7}{6}) dx}{\operatorname{tg}(\frac{2x+7}{6}) + 1}$.
9. $\int_0^4 20e^{-4x} \cos^2 x dx$.
10. $\int_3^7 x \ln(6+6x) dx$.
11. $\int_3^7 x(8x+1)(6x-6) dx$
12. $\int \frac{4x dx}{(8x-7)^2}$
13. $\int \frac{dx}{(7x-1)(6x-4)}$
14. $\int \frac{2 dx}{6x^2+36x+150}$
15. $\int \frac{(3x+6) dx}{5x^2-20x-105}$
16. $\int \frac{5x^3 dx}{2+1x^2}$
17. $\int \frac{(x^2+7) dx}{11-9x^2}$
18. $\int (3-6\sqrt{x})(4+4\sqrt{x}) dx$
19. $\int \frac{\sqrt{7x+1} dx}{7 dx}$
20. $\int \frac{7 dx}{\sqrt{3x^2-18x+102}}$
21. $\int \sqrt{10-11x^2} dx$
22. $\int (7x-5) \cos(8x-3) dx$
23. $\int 3 \sin^2(4x-6) \cos^2(4x-6) dx$
24. $\int \frac{7 dx}{1+\cos(5x+2)}$
25. $\int 8 \sin(8x+6) \sqrt{1-7 \cos^2(8x+6)} dx$
26. $\int \frac{4 dx}{\sin^3(5x+6) \cos^3(5x+6)}$
27. $\int \frac{3 \cos(8x+7) dx}{\sin^3(8x+7)}$
28. $\int \sin(3x-7) \sin(2x+2) dx$
29. $\int \operatorname{tg}^4(4x+5) dx$
30. $\int \arcsin(6x+6) dx$
31. $\int (6x^2-3x+2)e^{x+4} dx$
32. $\int \frac{x dx}{\operatorname{sh}^2(7x-2)}$
33. $\int 8x^3 \ln(3x+1) dx$
34. $\int \frac{(2x^2-7x+3) dx}{3x^2+30x+222}$
35. $\int \frac{8 dx}{216-x^3}$
36. $\int \frac{(3x+4) dx}{(x^2+3x-28)(x^2-5x+4)}$
37. $\int \sqrt{3x^2+42x+255} dx$
38. $\int \frac{-1x^2-26x+48}{x^3+216} dx$
39. $\int \frac{5 dx}{4+6x^{8/5}}$
40. $\int \frac{2x dx}{(3x+6)^8}$

Вариант 97

1. $\int_2^6 \frac{x^3 dx}{3 + 8x}$
2. $\int_1^3 \frac{12dx}{x(3 + 6x)}$
3. $\int_1^6 \frac{11dx}{x(49 + x^2)}$
4. $\int_2^8 \frac{15dx}{(9 + 36x)\sqrt{x^3}}$
5. $\int_2^4 \frac{x^3 dx}{\sqrt{25 - x^2}}$
6. $\int_5^6 \frac{23 dx}{36 + 25 \sin^2 x}$
7. $\int_2^3 \frac{5 \sin(\frac{3x + 5}{7}) dx}{\sin(\frac{3x + 5}{7}) - \cos(\frac{3x + 5}{7})}$
8. $\int_4^6 \frac{6 dx}{1 - \operatorname{ctg}(\frac{2x + 5}{9})}$
9. $\int_2^3 17e^{-3x} \cos^2 x dx$
10. $\int_1^5 x^3 \ln(25 + x^2) dx$
11. $\int_1^1 (3x - 5)^n dx$
12. $\int \frac{2x dx}{(3x - 6)^3}$
13. $\int \frac{5 dx}{x(4x + 1)}$
14. $\int \frac{5 dx}{2x^2 - 8x - 24}$
15. $\int \frac{(2x + 1) dx}{6x^2 + 84x + 444}$
16. $\int \frac{(8x - 6) dx}{11 + 1x^2}$
17. $\int \frac{(x^2 + 2) dx}{11 - 5x^2}$
18. $\int \sqrt{x}(3 + 4\sqrt{x}) dx$
19. $\int \sqrt{\frac{6 - 5x}{2 + 1x}} dx$
20. $\int \frac{6 dx}{\sqrt{5x^2 - 10x + 5}}$
21. $\int \sqrt{8x^2 - 4} dx$
22. $\int (5x - 5) \cos^2(4x - 4) dx$
23. $\int \frac{2 \sin^2(3x + 5) \cos^2(3x + 5) dx}{3 dx}$
24. $\int \frac{9 dx}{1 + \sin(7x - 4)}$
25. $\int \frac{9 dx}{6 - 5 \sin^2(5x - 1)}$
26. $\int \frac{5 dx}{\sin^2(8x + 7) \cos^4(8x + 7)}$
27. $\int \frac{8 \cos(7x - 3) dx}{\sin^3(7x - 3)}$
28. $\int \sin(3x - 7) \sin(2x + 2) dx$
29. $\int \operatorname{tg}^4(3x + 2) dx$
30. $\int x \arccos(6x + 6) dx$
31. $\int e^{4x} \cos^2(2x + 4) dx$
32. $\int x \operatorname{ch}(8x - 2) dx$
33. $\int 5x^2 \ln(8x - 4) dx$
34. $\int \frac{(3x^2 - 4x + 1) dx}{4x^2 + 32x + 208}$
35. $\int \frac{4 dx}{125 + x^3}$
36. $\int \frac{(4x - 7) dx}{(x^2 - 7x + 12)(x^2 + 1x - 12)}$
37. $\int \sqrt{4x^2 - 16x + 12} dx$
38. $\int \frac{2x^2 + 11x + 18}{x^4 + 9x^2} dx$
39. $\int \frac{4x^{3/2} + 6x^{2/3} + 5}{\sqrt{x}} dx$
40. $\int \frac{5x^2 dx}{(7x + 3)^9}$

Вариант 98

1. $\int_2^4 \frac{x dx}{(7 + 4x)^2}$.
2. $\int_2^8 \frac{16 dx}{x(7 - 2x)^2}$.
3. $\int_3^6 \frac{x dx}{2x^2 + 5x + 1}$.
4. $\int_3^5 \frac{10 dx}{(9 - 4x)\sqrt{x^3}}$.
5. $\int_3^5 \frac{16 dx}{(144 - x^2)^{3/2}}$.
6. $\int_7^8 \frac{23 dx}{16 + 81 \cos^2 x}$.
7. $\int_3^4 \frac{11 \operatorname{ctg}\left(\frac{2x + 6}{6}\right) dx}{1 - \sin\left(\frac{2x + 6}{6}\right)}$.
8. $\int_0^2 \frac{5 dx}{1 + \operatorname{ctg}\left(\frac{6x + 4}{6}\right)}$.
9. $\int_2^3 17e^{-3x} \cos^2 x dx$.
10. $\int_3^4 10 \cos(\ln(6x + 5)) dx$.
11. $\int (8x - 6)(5x + 5) dx$
12. $\int \frac{8 dx}{(2x - 1)^3}$
13. $\int \frac{4 dx}{x^2(8x - 3)}$
14. $\int \frac{4 dx}{5x^2 - 20x - 60}$
15. $\int \frac{(5x - 5) dx}{3x^2 - 42x + 147}$
16. $\int \frac{3x^2 dx}{11 + 9x^2}$
17. $\int \frac{2x^2 dx}{9 - 4x^2}$
18. $\int (4 + 7\sqrt{x})(2 + 7\sqrt{x^3}) dx$
19. $\int \frac{9 dx}{\sqrt{8 + 2x}}$
20. $\int \frac{5 dx}{x\sqrt{-9x^2 - 6x + 3}}$
21. $\int \sqrt{7x^2 + 10} dx$
22. $\int (2x + 4) \sin^2(8x - 6) dx$
23. $\int 4 \sin^4(5x - 2) dx$
24. $\int \frac{9 \sin x dx}{1 - \sin(8x - 7)}$
25. $\int \frac{5 dx}{8 + 6 \sin^2(5x - 5)}$
26. $\int \frac{4 dx}{\sin^3(3x + 3) \cos^3(3x + 3)}$
27. $\int \frac{5 \sin(7x - 4) dx}{\cos^3(7x - 4)}$
28. $\int \sin(7x + 4) \cos(9x - 4) dx$
29. $\int \operatorname{ctg}^4(7x + 3) dx$
30. $\int \operatorname{arctg}(5x + 7) dx$
31. $\int (2x - 5)e^{3x-3} dx$
32. $\int x \operatorname{sh}(8x - 3) dx$
33. $\int \frac{\ln(2x - 1) dx}{(2x - 1)^2}$
34. $\int \frac{(3x^2 + 2x + 4) dx}{4x^2 + 32x + 28}$
35. $\int \frac{3 dx}{1296 - x^4}$
36. $\int \frac{(3x - 5) dx}{(x^2 - 7x + 10)(x^2 - 1x - 20)}$
37. $\int \sqrt{2x^2 + 8x + 58} dx$
38. $\int \frac{-1x^2 - 26x + 48}{x^3 + 216} dx$
39. $\int \frac{6x^{5/2} + 3x^{4/3} + 4}{\sqrt{x}}$
40. $\int 4x(2x - 6)^6 dx$

Вариант 99

1. $\int_3^6 \frac{x^2 dx}{(4 + 4x)^2}$.
2. $\int_2^7 \frac{21 dx}{x^2(5 + 3x)}$.
3. $\int_2^4 \frac{6 dx}{x^2(9 + x^2)}$.
4. $\int_3^6 \frac{14 dx}{\sqrt{4 + 4x}\sqrt{15 + 3x}}$.
5. $\int_2^8 \frac{x^3 dx}{\sqrt{4 + x^2}}$.
6. $\int_7^8 \frac{20 dx}{16 - 9 \sin^2 x}$.
7. $\int_5^6 \frac{9 \cos(\frac{6x + 4}{17}) dx}{\sin(\frac{6x + 4}{17}) - \cos(\frac{6x + 4}{17})}$.
8. $\int_2^4 \frac{2 dx}{\operatorname{tg}(\frac{3x + 5}{9}) + 1}$.
9. $\int_1^5 \frac{9 dx}{5 + 10e^{-3x}}$.
10. $\int_1^5 x^3 \ln(9 + x^2) dx$.
11. $\int x(7x + 7)(8x - 4) dx$
12. $\int \frac{7x dx}{(5x + 1)^3}$
13. $\int \frac{4x dx}{(3x + 2)^2}$
14. $\int \frac{5 dx}{7x^2 - 56x + 112}$
15. $\int \frac{(3x - 5) dx}{6x^2 + 24x + 24}$
16. $\int \frac{3x dx}{(7 + 10x^2)^2}$
17. $\int \frac{2x^2 dx}{3 - 11x^2}$
18. $\int (6 + 5x)^{4/9} dx$
19. $\int (\sqrt{3x + 3} + \sqrt{7x - 4}) dx$
20. $\int \frac{4 dx}{x\sqrt{-3600x^2 - 960x + 5}}$
21. $\int \frac{8x dx}{\sqrt{2 + 9x^2}}$
22. $\int (6x + 7) \cos(3x - 4) dx$
23. $\int (2x + 3 \cos^2(8x + 3)) dx$
24. $\int \frac{6 dx}{1 - \cos(7x + 5)}$
25. $\int \frac{7 dx}{3 + 4 \sin^2(4x + 4)}$
26. $\int \frac{4 dx}{\sin^2(2x + 1) \cos(2x + 1)}$
27. $\int \frac{4 \sin^3(2x - 3) dx}{\cos(2x - 3)}$
28. $\int \cos(6x - 6) \cos(8x - 3) dx$
29. $\int \operatorname{ctg}^2(3x + 3) dx$
30. $\int x \operatorname{arcc} \operatorname{tg}(5x - 1) dx$
31. $\int \frac{2 dx}{5 + e^{-5x}}$
32. $\int x \operatorname{ch}(7x + 2) dx$
33. $\int 8x^3 \ln(3x + 1) dx$
34. $\int \frac{(6x^2 + 2x - 3) dx}{3x^2 - 6x + 3}$
35. $\int \frac{3 dx}{216 + x^3}$
36. $\int \frac{(5x + 7) dx}{(x^2 - 1x - 42)(x^2 - 5x - 14)}$
37. $\int \sqrt{3x^2 - 18x + 24} dx$
38. $\int \frac{x^2 + 31x + 102}{x^3 - 216} dx$
39. $\int \frac{(4 - 1x) dx}{3 + \sqrt[3]{x}}$
40. $\int \frac{2x dx}{(8x - 6)^7}$

Вариант 100

1. $\int_2^6 \frac{x^4 dx}{5 + 9x}$
2. $\int_3^9 \frac{18 dx}{x(7 + 5x)^2}$
3. $\int_3^7 \frac{14x^2 dx}{4 - x^2}$
4. $\int_3^8 \frac{10 dx}{x\sqrt{6 + 8x}}$
5. $\int_2^6 \frac{x^3 dx}{\sqrt{16 + x^2}}$
6. $\int_5^6 \frac{24 dx}{100 + 49 \cos^2 x}$
7. $\int_3^4 \frac{7 \sin(\frac{6x + 6}{8}) dx}{\sin(\frac{6x + 6}{8}) + \cos(\frac{6x + 6}{8})}$
8. $\int_4^6 \frac{7 dx}{1 - \operatorname{ctg}(\frac{2x + 4}{9})}$
9. $\int_3^6 \frac{6 dx}{6 + 10e^{-3x}}$
10. $\int_3^4 x^3 \ln(49 + x^2) dx$
11. $\int (4x - 1)^n dx$
12. $\int \frac{(5x - 3) dx}{(6x + 6)}$
13. $\int \frac{5x dx}{(2x - 7)^2}$
14. $\int \frac{6 dx}{3x^2 + 33x + 84}$
15. $\int \frac{(4x - 3) dx}{7x^2 - 63x + 140}$
16. $\int \frac{5x^3 dx}{6 + 7x^2}$
17. $\int \frac{7x^2 dx}{10 - 6x^2}$
18. $\int (8 + 7x^{9/2}) dx$
19. $\int \frac{\sqrt{3x + 5} dx}{5 dx}$
20. $\int \frac{5 dx}{\sqrt{6x^2 - 48x + 90}}$
21. $\int \sqrt{2 + 6x^2} dx$
22. $\int 7x^2 \cos(9x - 4) dx$
23. $\int (3x - 3 \sin^2(8x + 2)) dx$
24. $\int \frac{8x dx}{1 - \sin(3x + 2)}$
25. $\int 9 \sin(3x + 6) \sqrt{1 - 2 \cos^2(3x + 6)} dx$
26. $\int \frac{7 dx}{\sin(5x + 4) \cos(5x + 4)}$
27. $\int \frac{7 \sin^2(6x + 1) dx}{\cos^4(6x + 1)}$
28. $\int \cos(8x - 1) \cos(3x - 5) dx$
29. $\int \operatorname{ctg}^2(3x + 3) dx$
30. $\int x \operatorname{arctg}(8x + 6) dx$
31. $\int \frac{3 dx}{1 + e^{2x-4}}$
32. $\int \operatorname{sh}(4x + 3) \operatorname{ch}^2(4x + 3) dx$
33. $\int (7x - 6) \ln(5x + 3) dx$
34. $\int \frac{(4x^2 + 7x - 1) dx}{3x^2 - 3x - 90}$
35. $\int \frac{6 dx}{1x^2 + x^4}$
36. $\int \frac{(4x + 5) dx}{(x^2 + 10x + 21)(x^2 - 4x - 21)}$
37. $\int \sqrt{-3x^2 + 42x - 99} dx$
38. $\int \frac{5x^2 - 10x + 2}{x^4 - 2x^3} dx$
39. $\int \frac{(8 - 5x) dx}{4 + \sqrt{x}}$
40. $\int \frac{2x dx}{(3x + 3)^{11}}$

Вариант 101

1. $\int_1^3 \frac{x^3 dx}{6 + 8x}$
2. $\int_3^8 \frac{20dx}{x^2(5 - 5x)}$
3. $\int_2^6 \frac{10dx}{x^2(16 + x^2)}$
4. $\int_2^7 \frac{7x dx}{\sqrt{-1 + 3x}}$
5. $\int_3^6 \frac{x^2 dx}{\sqrt{81 - x^2}}$
6. $\int_5^6 \frac{23 dx}{16 + 64 \sin^2 x}$
7. $\int_6^7 \frac{10 \cos(\frac{2x + 2}{11}) dx}{\sin(\frac{2x + 2}{11}) - \cos(\frac{2x + 2}{11})}$
8. $\int_{-3}^{-2} 8 \operatorname{tg}^4(\frac{2x + 7}{8}) dx$
9. $\int_3^5 \frac{10 dx}{4 + 6e^{-2x}}$
10. $\int_2^4 x \ln(6 + 4x) dx$
11. $\int (5x - 1)(6x - 3) dx$
12. $\int \frac{6x dx}{(8x + 3)}$
13. $\int \frac{2 dx}{x(7x + 7)}$
14. $\int \frac{5 dx}{7x^2 - 56x + 112}$
15. $\int \frac{(6x + 3) dx}{2x^2 + 6x + 4}$
16. $\int \frac{7x^2 dx}{8 + 5x^2}$
17. $\int \frac{4x dx}{7 - 11x^2}$
18. $\int (5 + 6x)^{3/6} dx$
19. $\int x \sqrt{(3 - 7x)^3} dx$
20. $\int \frac{5 dx}{x \sqrt{-240x^2 + 240x + 5}}$
21. $\int \sqrt{3x^2 + 6} dx$
22. $\int (8x - 2) \sin(5x + 4) dx$
23. $\int (8x - 6 \sin^2(4x + 3)) dx$
24. $\int \frac{5 \sin x dx}{1 + \sin(7x + 1)}$
25. $\int 4 \sin(4x - 2) \sqrt{1 - 5 \sin^2(4x - 2)} dx$
26. $\int \frac{2 dx}{\sin^2(3x - 4) \cos^2(3x - 4)}$
27. $\int \frac{8 \sin(2x - 6) dx}{\cos^3(2x - 6)}$
28. $\int \cos(6x + 2) \cos(7x - 1) dx$
29. $\int \operatorname{ctg}^4(5x - 4) dx$
30. $\int x \arcsin(8x - 7) dx$
31. $\int (8x^2 - 4x + 5)e^{x+5} dx$
32. $\int \operatorname{sh}(2x + 2) \operatorname{ch}^2(2x + 2) dx$
33. $\int \frac{\ln(7x + 5) dx}{(7x + 5)^2}$
34. $\int \frac{(4x^2 + 1x + 3) dx}{2x^2 - 4x + 2}$
35. $\int \frac{(9x - 2) dx}{625 - x^4}$
36. $\int \frac{(6x - 5) dx}{(x^2 + 3x - 18)(x^2 + 11x + 30)}$
37. $\int \sqrt{4x^2 + 36x + 56} dx$
38. $\int \frac{3x^2 + 9x + 20}{x^4 - 16} dx$
39. $\int \frac{(2 - 1x) dx}{5 + \sqrt{x}}$
40. $\int \frac{9x^2 dx}{(4x - 5)^7}$

Вариант 102

1. $\int_3^5 \frac{x dx}{(3 - 5x)^3}$.
2. $\int_1^7 \frac{10 dx}{x(3 + 2x)^2}$.
3. $\int_1^3 \frac{8 dx}{x(9 + x^2)}$.
4. $\int_2^4 \frac{16x^2 dx}{\sqrt{-3 + 3x}}$.
5. $\int_1^3 \frac{x^2 dx}{\sqrt{9 + x^2}}$.
6. $\int_2^3 \frac{23 dx}{64 + 36 \cos^2 x}$.
7. $\int_0^1 \frac{9 \operatorname{ctg}(\frac{6x + 6}{10}) dx}{1 + \sin(\frac{6x + 6}{10})}$.
8. $\int_{-2}^{-1} 7 \operatorname{tg}^4(\frac{2x + 6}{3}) dx$.
9. $\int_3^8 \frac{10 dx}{3 + 3e^{-3x}}$.
10. $\int_3^7 \frac{\ln(7 + 8x) dx}{x^2}$.
11. $\int (6x + 5)^2 (5x - 1)^2 dx$
12. $\int \frac{9x dx}{(5x + 2)^3}$
13. $\int \frac{6 dx}{x(8x - 3)}$
14. $\int \frac{7 dx}{6x^2 + 6x - 180}$
15. $\int \frac{(2x + 4) dx}{6x^2 + 48x + 96}$
16. $\int \frac{9x dx}{(3 + 3x^2)^2}$
17. $\int \frac{9x^2 dx}{6 - 6x^2}$
18. $\int (6 - 2x^{2/4}) dx$
19. $\int \frac{\sqrt{3x + 5} dx}{4 dx}$
20. $\int \frac{4 dx}{\sqrt{7x^2 + 98x + 455}}$
21. $\int \sqrt{4 + 9x^2} dx$
22. $\int 3x^2 \sin(6x - 5) dx$
23. $\int 6 \sin^2(5x - 3) \cos^2(5x - 3) dx$
24. $\int \frac{6 dx}{\sin^3(4x - 2)}$
25. $\int \frac{4 dx}{8 + 3 \sin(6x + 2)}$
26. $\int \frac{6 dx}{\sin^2(2x - 2) \cos^4(2x - 2)}$
27. $\int \frac{7 \sin^2(2x - 5) dx}{\cos^4(2x - 5)}$
28. $\int \cos(5x - 6) \cos(8x + 4) dx$
29. $\int \operatorname{ctg}^2(3x + 3) dx$
30. $\int \operatorname{arcctg}(2x + 6) dx$
31. $\int \frac{7 dx}{6 + e^{-6x}}$
32. $\int \frac{x dx}{\operatorname{sh}^2(6x - 6)}$
33. $\int 5 \ln(2x + 7) dx$
34. $\int \frac{(5x^2 - 4x + 7) dx}{3x^2 + 18x + 27}$
35. $\int \frac{4 dx}{1x^2 + x^4}$
36. $\int \frac{(5x - 3) dx}{(x^2 - 11x + 28)(x^2 - 6x + 8)}$
37. $\int \sqrt{-5x^2 + 40x + 45} dx$
38. $\int \frac{6x^2 + 16x + 33}{x^3 - 27} dx$
39. $\int \frac{5 dx}{8 - 3x^{5/6}}$
40. $\int 3x(5x + 5)^8 dx$

Вариант 103

1. $\int_2^4 \frac{x dx}{(7 + 5x)^3}$.
2. $\int_1^7 \frac{14x dx}{(5 + x)(6 + x)}$.
3. $\int_3^5 \frac{10dx}{x^2(4 + x^2)}$.
4. $\int_3^5 \frac{16dx}{(4 - 16x)\sqrt{x^3}}$.
5. $\int_3^9 \frac{18 dx}{(x^2 - 4)^{3/2}}$.
6. $\int_2^3 \frac{22 dx}{9 + 64 \cos^2 x}$.
7. $\int_0^2 \frac{4 \operatorname{tg}(\frac{6x + 5}{11}) dx}{1 + \cos(\frac{6x + 5}{11})}$.
8. $\int_2^3 \frac{9 dx}{\operatorname{tg}(\frac{5x + 2}{8}) - 1}$.
9. $\int_1^3 \frac{7 dx}{4 + 8e^{-5x}}$.
10. $\int_2^3 4 \sin(\ln(7x + 9)) dx$.
11. $\int (3x + 2)^2(9x + 5)^2 dx$
12. $\int \frac{(3x - 3) dx}{(4x + 1)}$
13. $\int \frac{7x^2 dx}{(5x - 6)}$
14. $\int \frac{5 dx}{4x^2 + 4x - 24}$
15. $\int \frac{(5x - 5) dx}{3x^2 - 42x + 147}$
16. $\int \frac{5x dx}{10 + 5x^2}$
17. $\int \frac{(2x + 5) dx}{7 - 4x^2}$
18. $\int \sqrt{x^3}(7 + 6\sqrt{x}) dx$
19. $\int \frac{4x dx}{\sqrt{5 - 2x}}$
20. $\int \frac{5 dx}{x\sqrt{5854x^2 - 6174x + 2}}$
21. $\int \sqrt{10x^2 + 9} dx$
22. $\int (6x - 2) \cos(5x + 2) dx$
23. $\int 6 \sin(4x - 1) \cos^3(4x - 1) dx$
24. $\int \frac{2 \sin x dx}{1 + \sin(6x + 6)}$
25. $\int 3 \sin(6x + 5) \sqrt{1 + 8 \sin^2(6x + 5)} dx$
26. $\int \frac{2 dx}{\sin^3(7x - 4) \cos^3(7x - 4)}$
27. $\int \frac{8 \sin(5x + 4) dx}{\cos^3(5x + 4)}$
28. $\int \sin(8x + 3) \sin(3x + 1) dx$
29. $\int \operatorname{tg}^4(4x + 6) dx$
30. $\int x \arcsin(8x + 2) dx$
31. $\int e^{7x} \sin^2(9x - 6) dx$
32. $\int \operatorname{sh}^2(2x + 1) \operatorname{ch}(2x + 1) dx$
33. $\int 9 \ln(3x + 6) dx$
34. $\int \frac{(3x^2 - 4x + 6) dx}{5x^2 + 60x + 180}$
35. $\int \frac{9 dx}{36x^2 - x^4}$
36. $\int \frac{(3x + 1) dx}{(x^2 + 3x - 4)(x^2 - 3x - 28)}$
37. $\int \sqrt{7x^2 - 98x + 595} dx$
38. $\int \frac{x^2 + 1x + 125}{x^4 - 625} dx$
39. $\int \frac{5 dx}{x\sqrt{6 - 2x}}$
40. $\int 3x(6x + 7)^7 dx$

Вариант 104

1. $\int_3^8 \frac{x^4 dx}{2 + 9x}$
2. $\int_1^6 \frac{16x dx}{(7 + x)(4 + x)}$
3. $\int_3^5 \frac{x dx}{4x^2 + 2x + 4}$
4. $\int_1^7 \frac{15dx}{(4 + 36x)\sqrt{x^3}}$
5. $\int_3^5 \frac{x^3 dx}{\sqrt{169 - x^2}}$
6. $\int_2^3 \frac{22 dx}{4 + 36 \sin^2 x}$
7. $\int_3^4 \frac{9 dx}{\sin(\frac{5x + 5}{8}) \cdot \cos^3(\frac{5x + 5}{8})}$
8. $\int_1^3 \frac{9 dx}{1 - \operatorname{ctg}(\frac{7x + 6}{4})}$
9. $\int_2^6 \frac{6 dx}{6 + 7e^{-5x}}$
10. $\int_3^7 \frac{\ln(7 + 8x) dx}{x^2}$
11. $\int (4x - 1)^2(5x - 3)^2 dx$
12. $\int \frac{6 dx}{(8x - 6)^3}$
13. $\int \frac{6 dx}{x(8x - 3)}$
14. $\int \frac{5 dx}{2x^2 - 8x - 24}$
15. $\int \frac{(2x - 5) dx}{5x^2 + 10x + 25}$
16. $\int \frac{2x^2 dx}{3 + 6x^2}$
17. $\int \frac{(4x^2 + 3) dx}{7 - 9x^2}$
18. $\int \sqrt{x}(3 - 7\sqrt{x}) dx$
19. $\int x\sqrt{7 - 3x} dx$
20. $\int \frac{4 dx}{x\sqrt{28x^2 + 18x + 2}}$
21. $\int \frac{8x dx}{\sqrt{9 - 5x^2}}$
22. $\int 2x^2 \sin(5x + 4) dx$
23. $\int 5 \sin^2(6x + 1) \cos^2(6x + 1) dx$
24. $\int \frac{3 dx}{1 + \cos(6x - 6)}$
25. $\int \frac{5 dx}{2 - 4 \cos(9x - 4)}$
26. $\int \frac{9 dx}{\sin(7x + 6) \cos^2(7x + 6)}$
27. $\int \frac{7 \cos^2(2x + 3) dx}{\sin(2x + 3)}$
28. $\int \cos(2x + 2) \cos(6x + 2) dx$
29. $\int \operatorname{ctg}^3(8x + 2) dx$
30. $\int x \arcsin(8x - 7) dx$
31. $\int (4x^2 + 4x + 8)e^{x+4} dx$
32. $\int \operatorname{sh}^2(8x - 5) \operatorname{ch}(8x - 5) dx$
33. $\int 9 \ln(3x - 5) dx$
34. $\int \frac{(5x^2 - 6x - 2) dx}{3x^2 + 30x + 183}$
35. $\int \frac{(5x - 3) dx}{1296 - x^4}$
36. $\int \frac{(5x - 2) dx}{(x^2 - 13x + 42)(x^2 - 4x - 12)}$
37. $\int \sqrt{6x^2 - 12x + 12} dx$
38. $\int \frac{-1x^2 - 1x - 30}{x^3 + 216} dx$
39. $\int \frac{(4 + 6x) dx}{9 + \sqrt[3]{x}}$
40. $\int 9x^2(8x - 7)^7 dx$

Вариант 105

1. $\int_3^8 \frac{x^4 dx}{1 + 7x}$
2. $\int_2^8 \frac{15 dx}{x(3 - 4x)^2}$
3. $\int_3^9 \frac{x dx}{2x^2 + 4x - 1}$
4. $\int_1^7 \frac{13 dx}{x\sqrt{4 + 8x}}$
5. $\int_4^7 \frac{x^2 dx}{\sqrt{x^2 - 1}}$
6. $\int_2^3 \frac{35 dx}{81 - 9 \cos^2 x}$
7. $\int_0^1 \frac{9 \operatorname{tg}\left(\frac{6x + 5}{9}\right) dx}{1 + \cos\left(\frac{6x + 5}{9}\right)}$
8. $\int_1^2 \frac{9 \operatorname{tg}\left(\frac{2x + 7}{6}\right) dx}{\operatorname{tg}\left(\frac{2x + 7}{6}\right) + 1}$
9. $\int_1^5 18e^{1x} \cos^2 x dx$
10. $\int_3^9 \frac{\ln(4 + 3x) dx}{x^2}$
11. $\int (7x + 2)^n dx$
12. $\int \frac{4x dx}{(7x + 7)^2}$
13. $\int \frac{6x^2 dx}{(2x + 2)^7}$
14. $\int \frac{7 dx}{3x^2 + 18x + 24}$
15. $\int \frac{(3x - 3) dx}{3x^2 - 6x + 3}$
16. $\int \frac{(x^2 + 5) dx}{6 + 5x^2}$
17. $\int \frac{7x^3 dx}{4 - 3x^2}$
18. $\int (6 + 7\sqrt{x})(8 + 2\sqrt{x}) dx$
19. $\int x\sqrt{8 + 7x} dx$
20. $\int \frac{4 dx}{\sqrt{7x^2 + 98x + 455}}$
21. $\int \frac{5x dx}{\sqrt{6 + 5x^2}}$
22. $\int 4x^2 \sin(7x - 5) dx$
23. $\int 4 \sin^4(9x + 6) dx$
24. $\int \frac{7 dx}{\sin(8x - 3)}$
25. $\int 3 \sin(6x + 4) \sqrt{1 - 5 \cos^2(6x + 4)} dx$
26. $\int \frac{6 dx}{\sin^2(2x - 2) \cos^4(2x - 2)}$
27. $\int \frac{9 \sin(5x - 4) dx}{\cos^2(5x - 4)}$
28. $\int \cos(6x + 1) \cos(3x - 5) dx$
29. $\int \operatorname{ctg}^3(2x + 2) dx$
30. $\int \arcsin(5x + 1) dx$
31. $\int e^{4x} \sin(3x + 3) dx$
32. $\int \operatorname{sh}^2(3x - 7) \operatorname{ch}(3x - 7) dx$
33. $\int 5x^2 \ln(8x - 4) dx$
34. $\int \frac{(3x^2 + 6x + 4) dx}{7x^2 + 35x + 28}$
35. $\int \frac{4 dx}{1296 - x^4}$
36. $\int \frac{(4x - 3) dx}{(x^2 + 5x - 6)(x^2 - 1x - 42)}$
37. $\int \sqrt{7x^2 + 84x + 259} dx$
38. $\int \frac{2x^2 - 41x + 180}{x^3 - 12x^2 + 36x} dx$
39. $\int \frac{3 dx}{2 + 1x^{7/2}}$
40. $\int 7x^2(3x + 3)^8 dx$

Вариант 106

1. $\int_3^7 \frac{x dx}{(6 + 6x)^2}$.
2. $\int_2^6 \frac{20 dx}{x(3 + 5x)}$.
3. $\int_3^9 \frac{x dx}{3x^2 - 4x + 2}$.
4. $\int_2^8 \frac{9 dx}{\sqrt{5 + 4x}\sqrt{8 + 3x}}$.
5. $\int_3^7 \frac{21 dx}{(x^2 - 1)^{3/2}}$.
6. $\int_9^{10} \frac{30 dx}{81 - 36 \cos^2 x}$.
7. $\int_0^2 \frac{8 \operatorname{ctg}(\frac{2x + 2}{10}) dx}{1 + \sin(\frac{2x + 2}{10})}$.
8. $\int_5^7 \frac{8 dx}{1 - \operatorname{ctg}(\frac{3x + 7}{4})}$.
9. $\int_0^1 18e^{-1x} \sin^2 x dx$.
10. $\int_1^5 x^3 \ln(9 + x^2) dx$.
11. $\int_1^1 (5x + 5)^n dx$
12. $\int \frac{8x dx}{(4x - 1)^3}$
13. $\int \frac{9 dx}{x^2(2x - 6)}$
14. $\int \frac{6 dx}{3x^2 + 18x - 21}$
15. $\int \frac{(3x - 1) dx}{7x^2 - 14x - 21}$
16. $\int \frac{(x^2 + 6) dx}{7 + 10x^2}$
17. $\int \frac{(9x - 4) dx}{5 - 4x^2}$
18. $\int (7 + 3x)(5 - 5\sqrt{x^3}) dx$
19. $\int \sqrt{3x + 3} dx$
20. $\int \frac{7 dx}{x\sqrt{-17052x^2 - 4116x + 5}}$
21. $\int \frac{2x dx}{\sqrt{11 - 5x^2}}$
22. $\int (7x - 2) \left(\sin(9x + 2) + \cos(9x + 2) \right) dx$
23. $\int 2 \cos^4(7x - 3) dx$
24. $\int \frac{3 \sin x dx}{1 - \sin(4x + 2)}$
25. $\int 6 \sin(8x - 2) \sqrt{1 + 4 \sin^2(8x - 2)} dx$
26. $\int \frac{3 dx}{\sin^2(8x - 2) \cos^4(8x - 2)}$
27. $\int \frac{9 \sin(5x - 4) dx}{\cos^2(5x - 4)}$
28. $\int \sin(2x - 3) \sin(9x - 3) dx$
29. $\int \operatorname{ctg}^3(6x - 7) dx$
30. $\int \operatorname{arcctg}(4x + 2) dx$
31. $\int (7x - 4) 3^{4x-1} dx$
32. $\int \operatorname{sh}^2(7x + 2) \operatorname{ch}(7x + 2) dx$
33. $\int 9x^3 \ln(8x - 5) dx$
34. $\int \frac{(5x^2 + 6x - 4) dx}{2x^2 + 4x + 34}$
35. $\int \frac{5 dx}{81 - x^4}$
36. $\int \frac{(3x + 7) dx}{(x^2 + 1x - 20)(x^2 + 3x - 28)}$
37. $\int \sqrt{3x^2 + 33x + 90} dx$
38. $\int \frac{-4x^2 + 17x - 12}{x^3 - 4x^2 + 4x} dx$
39. $\int \frac{(2 - 1x) dx}{5 + \sqrt{x}}$
40. $\int \frac{8x dx}{(6x - 2)^8}$

Вариант 107

1. $\int_3^5 \frac{x^2 dx}{(6-6x)^2}$.
2. $\int_1^4 \frac{22dx}{(4+4x)(-6+7x)}$.
3. $\int_2^8 \frac{6dx}{x(49+x^2)}$.
4. $\int_3^5 \frac{7 dx}{x\sqrt{3+2x}}$.
5. $\int_2^5 \frac{19 dx}{(1+x^2)^{3/2}}$.
6. $\int_5^6 \frac{20 dx}{16+81 \sin^2 x}$.
7. $\int_5^6 \frac{8 \sin(\frac{5x+3}{5}) dx}{\sin(\frac{5x+3}{5}) + \cos(\frac{5x+3}{5})}$.
8. $\int_4^5 \frac{9 dx}{\operatorname{tg}(\frac{3x+2}{9}) - 1}$.
9. $\int_0^3 20e^{-4x} \cos^2 x dx$.
10. $\int_3^6 x \ln(7+4x) dx$.
11. $\int (6x+4)(3x-5) dx$
12. $\int \frac{(8x-6) dx}{(5x+1)}$
13. $\int \frac{4x dx}{(8x-4)^2}$
14. $\int \frac{3 dx}{2x^2+20x+122}$
15. $\int \frac{(4x+2) dx}{6x^2-54x+108}$
16. $\int \frac{(x^2+2) dx}{7+8x^2}$
17. $\int \frac{3x dx}{(6-6x^2)^2}$
18. $\int (2-3\sqrt{x})(7+3\sqrt{x}) dx$
19. $\int \frac{2 dx}{\sqrt{6x+5}}$
20. $\int \frac{5 dx}{x\sqrt{4116x^2-1176x+3}}$
21. $\int \sqrt{8x^2+10} dx$
22. $\int (5x-6) \sin^2(2x-6) dx$
23. $\int 7 \cos^4(2x+3) dx$
24. $\int \frac{6 dx}{1+\cos(7x+4)}$
25. $\int 6 \sin(8x-2) \sqrt{1+4 \sin^2(8x-2)} dx$
26. $\int \frac{9 dx}{\sin(6x+7) \cos^2(6x+7)}$
27. $\int \frac{2 \sin(4x-7) dx}{\cos^3(4x-7)}$
28. $\int \sin(4x-7) \cos(5x+5) dx$
29. $\int \operatorname{tg}^3(4x-1) dx$
30. $\int x \arccos(3x+3) dx$
31. $\int \frac{6 dx}{1+e^{8x-3}}$
32. $\int \operatorname{sh}(8x-6) \operatorname{ch}^2(8x-6) dx$
33. $\int \frac{\ln(8x+2) dx}{72x+18}$
34. $\int \frac{(4x^2-7x+6) dx}{5x^2-10x-175}$
35. $\int \frac{5 dx}{9x^2-x^4}$
36. $\int \frac{(3x+4) dx}{(x^2+3x-28)(x^2-5x+4)}$
37. $\int \sqrt{-2x^2+28x-48} dx$
38. $\int \frac{4x^2-15x+0}{x^4-256} dx$
39. $\int \frac{4 dx}{5+1x^{6/4}}$
40. $\int 8x^2(7x-2)^5 dx$

Вариант 108

1. $\int_1^4 \frac{x dx}{(5 + 3x)^2}$.
2. $\int_3^6 \frac{19 dx}{x(3 + 6x)}$.
3. $\int_1^6 \frac{10 dx}{x^2(1 + x^2)}$.
4. $\int_1^7 \frac{14\sqrt{x} dx}{1 - 25x}$.
5. $\int_2^4 \frac{19 dx}{(225 - x^2)^{3/2}}$.
6. $\int_2^3 \frac{18 dx}{4 + 9 \sin^2 x}$.
7. $\int_4^5 \frac{11 \operatorname{tg}\left(\frac{2x + 3}{10}\right) dx}{1 - \cos\left(\frac{2x + 3}{10}\right)}$.
8. $\int_5^7 \frac{8 dx}{1 - \operatorname{ctg}\left(\frac{3x + 7}{4}\right)}$.
9. $\int_1^6 14e^{-1x} \cos^2 x dx$.
10. $\int_2^6 x \ln(6 + 4x) dx$.
11. $\int (6x - 3)^2(4x + 6)^2 dx$
12. $\int \frac{4 dx}{(7x + 3)^2}$
13. $\int \frac{9 dx}{x^2(7x + 4)}$
14. $\int \frac{3 dx}{3x^2 - 42x + 147}$
15. $\int \frac{(6x - 2) dx}{3x^2 + 36x + 108}$
16. $\int \frac{9x dx}{10 + 3x^2}$
17. $\int \frac{4x dx}{6 - 11x^2}$
18. $\int (8 + 6\sqrt{x})(8 - 4\sqrt{x}) dx$
19. $\int \frac{3 dx}{\sqrt{2 + 3x}}$
20. $\int \frac{3 dx}{\sqrt{6x^2 - 48x + 96}}$
21. $\int \frac{3x dx}{\sqrt{6 + 7x^2}}$
22. $\int (2x - 5) \sin(4x + 1) dx$
23. $\int 7 \sin^2(3x + 2) \cos(3x + 2) dx$
24. $\int \frac{4 dx}{\sin(5x + 7)}$
25. $\int 3 \cos(4x - 4) \sqrt{1 + 7 \sin^2(4x - 4)} dx$
26. $\int \frac{9 dx}{\sin^2(5x + 6) \cos^2(5x + 6)}$
27. $\int \frac{8 \cos(7x + 2) dx}{\sin^3(7x + 2)}$
28. $\int \sin(5x + 2) \sin(2x + 2) dx$
29. $\int \operatorname{tg}^3(3x - 3) dx$
30. $\int \operatorname{arcctg}(2x + 7) dx$
31. $\int e^{8x} \sin^2(2x - 4) dx$
32. $\int x \operatorname{sh}(8x + 3) dx$
33. $\int 3 \ln^2(2x + 6) dx$
34. $\int \frac{(3x^2 - 4x + 1) dx}{2x^2 + 20x + 50}$
35. $\int \frac{(8x + 2) dx}{16 - x^4}$
36. $\int \frac{(5x + 4) dx}{(x^2 - 0x - 9)(x^2 + 2x - 15)}$
37. $\int \sqrt{-2x^2 + 28x - 90} dx$
38. $\int \frac{8x^2 + 2x - 20}{x^4 - 4x^2} dx$
39. $\int \frac{(8 - 3x) dx}{7 + \sqrt[3]{x}}$
40. $\int \frac{3x dx}{(8x - 5)^9}$

Вариант 109

1. $\int_3^6 \frac{x dx}{(6 - 5x)^3}$.
2. $\int_2^8 \frac{15dx}{(7 + 5x)(-3 + 5x)}$.
3. $\int_2^8 \frac{6dx}{x(49 + x^2)}$.
4. $\int_3^7 \frac{12 dx}{\sqrt{2 + 5x}\sqrt{6 + 2x}}$.
5. $\int_1^6 \frac{x^3 dx}{\sqrt{81 - x^2}}$.
6. $\int_9^{10} \frac{30 dx}{81 - 64 \cos^2 x}$.
7. $\int_5^6 \frac{10 dx}{\sin(\frac{5x + 7}{5}) \cdot \cos^3(\frac{5x + 7}{5})}$.
8. $\int_3^5 6 \operatorname{ctg}^3(\frac{5x + 3}{9}) dx$.
9. $\int_2^4 14e^{1x} \sin^2 x dx$.
10. $\int_2^5 x \ln(5 + 10x) dx$.
11. $\int x(8x + 1)(9x + 1) dx$
12. $\int \frac{4x dx}{(3x + 5)}$
13. $\int \frac{6x dx}{(3x - 3)^2}$
14. $\int \frac{7 dx}{3x^2 - 24x + 123}$
15. $\int \frac{(6x + 4) dx}{5x^2 + 30x + 45}$
16. $\int \frac{3x dx}{4 + 9x^2}$
17. $\int \frac{8x dx}{(10 - 7x^2)^2}$
18. $\int \sqrt{x^3}(4 - 2\sqrt{x}) dx$
19. $\int \frac{2 dx}{\sqrt{(8 + 4x)^3}}$
20. $\int \frac{4 dx}{\sqrt{3x^2 + 42x + 150}}$
21. $\int \sqrt{6x^2 + 6} dx$
22. $\int (6x - 5) \sin(2x - 3) dx$
23. $\int 2 \sin(5x + 3) \cos^3(5x + 3) dx$
24. $\int \frac{3 dx}{1 + \sin(6x + 3)}$
25. $\int \frac{7 \sin(4x - 6) dx}{\sqrt{1 + 6 \sin^2(4x - 6)}}$
26. $\int \frac{6 dx}{\sin^4(5x + 3) \cos^2(5x + 3)}$
27. $\int \frac{2 \sin(4x - 7) dx}{\cos^3(4x - 7)}$
28. $\int \sin(2x - 6) \sin(4x - 5) dx$
29. $\int \operatorname{tg}^3(5x - 3) dx$
30. $\int \operatorname{arcctg}(8x - 6) dx$
31. $\int e^{5x} \cos^2(4x - 4) dx$
32. $\int x^2 \operatorname{sh}(4x + 6) dx$
33. $\int (6x + 2) \ln(7x - 3) dx$
34. $\int \frac{(4x^2 - 2x + 7) dx}{4x^2 - 48x + 288}$
35. $\int \frac{(6x + 3) dx}{16 - x^4}$
36. $\int \frac{(6x + 1) dx}{(x^2 + 1x - 12)(x^2 + 11x + 28)}$
37. $\int \sqrt{-2x^2 - 16x - 14} dx$
38. $\int \frac{2x^2 - 7x + 9}{x^4 - 9x^2} dx$
39. $\int \frac{(8 + 5x) dx}{9 + \sqrt[3]{x}}$
40. $\int \frac{2x^2 dx}{(8x - 2)^6}$

Вариант 110

1. $\int_1^5 \frac{x dx}{(4 + 4x)^3}$.
2. $\int_2^8 \frac{11 dx}{x^2(6 + 5x)}$.
3. $\int_3^7 \frac{x dx}{4x^2 + 4x + 3}$.
4. $\int_1^5 \frac{8 dx}{(4 + 25x)\sqrt{x^3}}$.
5. $\int_3^7 \frac{x^2 dx}{\sqrt{25 + x^2}}$.
6. $\int_7^8 \frac{30 dx}{81 - 4 \cos^2 x}$.
7. $\int_5^6 \frac{4 \operatorname{ctg}(\frac{5x + 3}{8}) dx}{1 - \sin(\frac{5x + 3}{8})}$.
8. $\int_3^4 \frac{4 \operatorname{ctg}^4(\frac{3x + 2}{9}) dx}{3}$.
9. $\int_2^3 18e^{1x} \cos^2 x dx$.
10. $\int_3^7 \frac{\ln(4 + 10x) dx}{x^2}$.
11. $\int x(2x - 5)(8x + 2) dx$
12. $\int \frac{4 dx}{(6x - 5)^3}$
13. $\int \frac{5 dx}{x(6x - 7)}$
14. $\int \frac{7 dx}{3x^2 + 18x + 24}$
15. $\int \frac{(2x - 5) dx}{5x^2 + 10x + 25}$
16. $\int \frac{6x^3 dx}{8 + 9x^2}$
17. $\int \frac{(3x^2 + 4) dx}{7 - 5x^2}$
18. $\int (6 + 5x)^{4/9} dx$
19. $\int \frac{4x dx}{\sqrt{5 - 2x}}$
20. $\int \frac{5 dx}{x\sqrt{-2688x^2 - 1344x + 7}}$
21. $\int \sqrt{7 - 4x^2} dx$
22. $\int (4x + 7) \cos(7x - 1) dx$
23. $\int 3 \cos^5(4x + 3) dx$
24. $\int \frac{4x dx}{1 - \sin(7x - 3)}$
25. $\int 5 \sin(4x + 6) \sqrt{1 + 9 \cos^2(4x + 6)} dx$
26. $\int \frac{8 dx}{\sin^4(5x - 1) \cos^2(5x - 1)}$
27. $\int \frac{8 \sin(2x - 6) dx}{\cos^3(2x - 6)}$
28. $\int \sin(2x - 6) \sin(4x - 5) dx$
29. $\int \operatorname{tg}^2(5x + 6) dx$
30. $\int \operatorname{arctg}(2x - 4) dx$
31. $\int e^{7x} \cos(4x - 4) dx$
32. $\int x \operatorname{sh}(3x + 4) dx$
33. $\int 9 \ln(2x + 4) dx$
34. $\int \frac{(2x^2 - 1x - 5) dx}{7x^2 + 70x + 182}$
35. $\int \frac{6 dx}{25x^2 - x^4}$
36. $\int \frac{(2x - 7) dx}{(x^2 - 3x - 28)(x^2 + 1x - 12)}$
37. $\int \sqrt{5x^2 + 20x + 265} dx$
38. $\int \frac{2x^2 + 6x + 18}{x^4 + 9x^2} dx$
39. $\int \frac{8 dx}{x\sqrt{5 + 5x}}$
40. $\int \frac{3x^2 dx}{(8x - 6)^{10}}$

Вариант 111

1. $\int_2^6 \frac{x^4 dx}{5 + 9x}$
2. $\int_1^3 \frac{17x dx}{(7 + x)(2 + x)}$
3. $\int_1^7 \frac{x dx}{2x^2 - 4x + 4}$
4. $\int_1^7 \frac{13 dx}{x\sqrt{4 + 8x}}$
5. $\int_2^4 \frac{x^2 dx}{\sqrt{225 - x^2}}$
6. $\int_7^8 \frac{23 dx}{64 + 16 \sin^2 x}$
7. $\int_1^2 \frac{6 \cos(\frac{5x + 7}{9}) dx}{\sin(\frac{5x + 7}{9}) + \cos(\frac{5x + 7}{9})}$
8. $\int_{-1}^0 6 \operatorname{ctg}^3(\frac{2x + 4}{8}) dx$
9. $\int_0^1 15e^{-2x} \sin^2 x dx$
10. $\int_3^3 8 \sin(\ln(7x + 7)) dx$
11. $\int_2^2 (4x - 1)^2(5x - 3)^2 dx$
12. $\int \frac{3x dx}{(6x - 7)}$
13. $\int \frac{7 dx}{x^2(3x - 6)}$
14. $\int \frac{6 dx}{3x^2 - 30x + 75}$
15. $\int \frac{(2x + 1) dx}{3x^2 - 18x + 27}$
16. $\int \frac{4x^3 dx}{3 + 10x^2}$
17. $\int \frac{7x^3 dx}{4 - 3x^2}$
18. $\int \sqrt{x^3}(2 - 5\sqrt{x}) dx$
19. $\int x\sqrt{5 + 7x} dx$
20. $\int \frac{4 dx}{\sqrt{4x^2 + 16x + 16}}$
21. $\int \frac{7x dx}{\sqrt{9x^2 - 11}}$
22. $\int (7x - 4) \sin(5x - 3) dx$
23. $\int (3x - 2 \sin^2(8x - 6)) dx$
24. $\int \frac{5 dx}{1 - \sin(3x - 1)}$
25. $\int \frac{5 dx}{8 + 7 \cos(5x - 5)}$
26. $\int \frac{5 dx}{\sin(6x + 3) \cos(6x + 3)}$
27. $\int \frac{5 \sin^2(7x + 3) dx}{\cos^4(7x + 3)}$
28. $\int \sin(7x - 6) \cos(8x + 2) dx$
29. $\int \operatorname{ctg}^3(5x - 6) dx$
30. $\int \operatorname{arcctg}(4x + 4) dx$
31. $\int \frac{7 dx}{2 + e^{3x}}$
32. $\int x \operatorname{ch}(2x + 5) dx$
33. $\int 3 \ln^2(2x + 6) dx$
34. $\int \frac{(4x^2 + 2x + 5) dx}{5x^2 - 50x + 370}$
35. $\int \frac{8 dx}{16x^2 - x^4}$
36. $\int \frac{(4x + 5) dx}{(x^2 + 1x - 30)(x^2 + 3x - 18)}$
37. $\int \sqrt{6x^2 + 18x + 12} dx$
38. $\int \frac{3x^2 + 9x + 20}{x^4 - 16} dx$
39. $\int \frac{(2 + 3x) dx}{7 + \sqrt{x}}$
40. $\int 6x^2(8x + 7)^8 dx$

Вариант 112

1. $\int_2^8 \frac{x^3 dx}{5 + 8x}$
2. $\int_2^8 \frac{16x dx}{(6 + x)(5 + x)}$
3. $\int_3^8 \frac{x dx}{2x^2 + 2x - 6}$
4. $\int_3^8 \frac{17x dx}{\sqrt{-1 + 6x}}$
5. $\int_3^9 \frac{x^2 dx}{\sqrt{225 - x^2}}$
6. $\int_2^3 \frac{18 dx}{16 + 36 \sin^2 x}$
7. $\int_{-1}^0 \frac{9 \operatorname{tg}(\frac{4x + 7}{9}) dx}{1 + \cos(\frac{4x + 7}{9})}$
8. $\int_4^5 \frac{2 \operatorname{tg}(\frac{6x + 2}{9}) dx}{\operatorname{tg}(\frac{6x + 2}{9}) + 1}$
9. $\int_1^2 18e^{-3x} \sin^2 x dx$
10. $\int_3^6 x^3 \ln(25 + x^2) dx$
11. $\int_3^6 x(2x - 5)(9x - 3) dx$
12. $\int \frac{6 dx}{(5x + 5)^2}$
13. $\int \frac{dx}{(2x + 2)(6x - 2)}$
14. $\int \frac{3 dx}{6x^2 - 72x + 216}$
15. $\int \frac{(4x - 3) dx}{3x^2 - 6x - 45}$
16. $\int \frac{8x dx}{2 + 10x^2}$
17. $\int \frac{(7x - 4) dx}{6 - 2x^2}$
18. $\int (5 + 6x)^{3/6} dx$
19. $\int \sqrt{\frac{8x + 6}{4x - 6}} dx$
20. $\int \frac{2 dx}{x\sqrt{1400x^2 - 560x + 2}}$
21. $\int \frac{2x dx}{\sqrt{6x^2 + 2}}$
22. $\int (4x - 5) \sin^2(7x + 2) dx$
23. $\int 7 \cos^5(8x + 2) dx$
24. $\int \frac{8 dx}{\cos^3(7x - 1)}$
25. $\int 9 \cos(3x - 2) \sqrt{1 - 5 \sin^2(3x - 2)} dx$
26. $\int \frac{2 dx}{\sin^2(4x + 1) \cos^4(4x + 1)}$
27. $\int \frac{3 \sin^2(5x + 5) dx}{\cos(5x + 5)}$
28. $\int \sin(5x - 7) \sin(2x - 5) dx$
29. $\int \operatorname{tg}^4(7x + 1) dx$
30. $\int \arcsin(6x + 6) dx$
31. $\int (2x + 5) 8^{9x+5} dx$
32. $\int \operatorname{sh}^2(7x - 3) \operatorname{ch}(7x - 3) dx$
33. $\int 9 \ln(2x + 4) dx$
34. $\int \frac{(6x^2 - 1x + 2) dx}{7x^2 + 21x - 126}$
35. $\int \frac{6 dx}{16 - x^4}$
36. $\int \frac{(6x + 7) dx}{(x^2 + 11x + 28)(x^2 + 1x - 42)}$
37. $\int \sqrt{-6x^2 - 48x + 120} dx$
38. $\int \frac{2x^2 + 11x + 18}{x^4 + 9x^2} dx$
39. $\int \frac{(7 + 1x) dx}{8 + \sqrt{x}}$
40. $\int 3x(2x + 6)^{10} dx$

Вариант 113

1. $\int_3^7 \frac{x^3 dx}{6 + 5x}$
2. $\int_3^7 \frac{13dx}{x^2(7 - 5x)}$
3. $\int_3^9 \frac{15x^2 dx}{1 - x^2}$
4. $\int_1^5 \frac{11dx}{(4 + 16x)\sqrt{x^3}}$
5. $\int_1^6 \frac{x^2 dx}{\sqrt{100 - x^2}}$
6. $\int_9^{10} \frac{25 dx}{36 + 25 \cos^2 x}$
7. $\int_3^4 \frac{4 \operatorname{tg}\left(\frac{6x + 7}{10}\right) dx}{1 - \cos\left(\frac{6x + 7}{10}\right)}$
8. $\int_2^4 9 \operatorname{ctg}^3\left(\frac{2x + 2}{8}\right) dx$
9. $\int_0^1 20e^{-1x} \sin^2 x dx$
10. $\int_3^4 9 \sin(\ln(5x + 6)) dx$
11. $\int_3^4 x(7x - 4)(9x - 3) dx$
12. $\int \frac{4x dx}{(8x - 7)^2}$
13. $\int \frac{4 dx}{x(5x - 1)}$
14. $\int \frac{6 dx}{6x^2 - 72x + 366}$
15. $\int \frac{(3x - 1) dx}{7x^2 - 14x - 21}$
16. $\int \frac{(5x - 2) dx}{11 + 2x^2}$
17. $\int \frac{(6x^2 + 4) dx}{11 - 3x^2}$
18. $\int (7 + 3x)(5 - 5\sqrt{x^3}) dx$
19. $\int \frac{2 dx}{\sqrt{6 - 1x}}$
20. $\int \frac{5 dx}{x\sqrt{-168x^2 + 14x + 7}}$
21. $\int \frac{8x dx}{\sqrt{9 - 2x^2}}$
22. $\int (5x + 3) \sin(8x + 3) dx$
23. $\int 6 \sin^3(2x - 3) dx$
24. $\int \frac{8 dx}{1 - \cos(6x - 5)}$
25. $\int 4 \cos(2x + 7) \sqrt{1 + 6 \sin^2(2x + 7)} dx$
26. $\int \frac{2 dx}{\sin^2(6x - 2) \cos^4(6x - 2)}$
27. $\int \frac{4 \sin^2(5x - 1) dx}{\cos^4(5x - 1)}$
28. $\int \sin(2x - 1) \sin(4x + 5) dx$
29. $\int \operatorname{ctg}^4(4x + 3) dx$
30. $\int \arccos(7x + 4) dx$
31. $\int (3x - 5)7^{7x+3} dx$
32. $\int x \operatorname{ch}(3x + 7) dx$
33. $\int (8x + 4) \ln(5x - 2) dx$
34. $\int \frac{(5x^2 + 1x + 4) dx}{4x^2 + 48x + 148}$
35. $\int \frac{9 dx}{27 - x^3}$
36. $\int \frac{(4x - 4) dx}{(x^2 - 1x - 12)(x^2 + 8x + 15)}$
37. $\int \sqrt{-5x^2 - 70x - 165} dx$
38. $\int \frac{4x^2 + 12x - 32}{x^4 - 8x^2 + 16} dx$
39. $\int \frac{4 dx}{x\sqrt{6 + 4x}}$
40. $\int \frac{7x^2 dx}{(4x + 4)^5}$

Вариант 114

1. $\int_2^7 \frac{x dx}{(3-2x)^3}$.
2. $\int_3^8 \frac{15x dx}{(7+x)(4+x)}$.
3. $\int_3^5 \frac{x dx}{4x^2+2x+4}$.
4. $\int_3^9 \frac{6\sqrt{x} dx}{1-36x}$.
5. $\int_3^5 \frac{15 dx}{(25+x^2)^{3/2}}$.
6. $\int_7^8 \frac{25 dx}{49+4\sin^2 x}$.
7. $\int_0^1 \frac{11 \cos(\frac{2x+7}{8}) dx}{\sin(\frac{2x+7}{8}) - \cos(\frac{2x+7}{8})}$.
8. $\int_{\frac{3}{3}}^4 4 \operatorname{ctg}^3(\frac{2x+2}{8}) dx$.
9. $\int_1^7 16e^{-4x} \cos^2 x dx$.
10. $\int_3^7 x \ln(3+8x) dx$.
11. $\int_3^3 x(2x+5)(3x-4) dx$
12. $\int \frac{(7x-1) dx}{(8x-5)}$
13. $\int \frac{3x^2 dx}{(6x+7)}$
14. $\int \frac{3 dx}{7x^2+70x+175}$
15. $\int \frac{(6x-5) dx}{5x^2-30x+45}$
16. $\int \frac{2x dx}{(4+2x^2)^2}$
17. $\int \frac{6x dx}{(9-3x^2)^2}$
18. $\int (2+3\sqrt{x})(8+7\sqrt{x}) dx$
19. $\int \sqrt{(8-6x)^3} dx$
20. $\int \frac{6 dx}{\sqrt{4x^2+4x-120}}$
21. $\int \sqrt{10-11x^2} dx$
22. $\int (7x-5) \cos(8x-3) dx$
23. $\int (5x+5 \cos^2(2x+6)) dx$
24. $\int \frac{8 dx}{1-\cos(6x-4)}$
25. $\int \frac{5 dx}{5+3\sin^2(6x+1)}$
26. $\int \frac{7 dx}{\sin^4(4x+5) \cos^2(4x+5)}$
27. $\int \frac{5 \cos^3(8x+5) dx}{\sin(8x+5)}$
28. $\int \sin(8x-6) \cos(6x-3) dx$
29. $\int \operatorname{tg}^3(2x-6) dx$
30. $\int x \arcsin(4x+5) dx$
31. $\int e^{3x} \cos^2(7x-1) dx$
32. $\int x \operatorname{ch}(7x-5) dx$
33. $\int 2 \ln(4x-7) dx$
34. $\int \frac{(5x^2+1x+3) dx}{5x^2-55x+140}$
35. $\int \frac{6 dx}{125+x^3}$
36. $\int \frac{(3x-1) dx}{(x^2-3x-18)(x^2-2x-15)}$
37. $\int \sqrt{7x^2-14x-21} dx$
38. $\int \frac{x^2-30x+108}{x^3+216} dx$
39. $\int \frac{7 dx}{x\sqrt{2+3x}}$
40. $\int \frac{2x dx}{(5x+7)^5}$

Вариант 115

1. $\int_1^5 \frac{x^2 dx}{(3 + 6x)^2}$.
2. $\int_1^4 \frac{22dx}{x(4 + 5x)}$.
3. $\int_2^8 \frac{7dx}{x^2(1 + x^2)}$.
4. $\int_2^5 \frac{15 dx}{\sqrt{4 + 5x}\sqrt{13 - 2x}}$.
5. $\int_4^9 \frac{x^3 dx}{\sqrt{x^2 - 1}}$.
6. $\int_5^6 \frac{23 dx}{81 - 36 \sin^2 x}$.
7. $\int_2^3 \frac{9 \cos(\frac{2x + 4}{5}) dx}{\sin(\frac{2x + 4}{5}) + \cos(\frac{2x + 4}{5})}$.
8. $\int_3^4 \frac{9 \operatorname{tg}(\frac{2x + 4}{9}) dx}{\operatorname{tg}(\frac{2x + 4}{9}) - 1}$.
9. $\int_1^6 21e^{1x} \cos^2 x dx$.
10. $\int_2^7 \frac{\ln(7 + 8x) dx}{x^2}$.
11. $\int x(2x - 2)(9x - 4) dx$
12. $\int \frac{3x dx}{(7x - 1)}$
13. $\int \frac{4 dx}{x(5x - 2)}$
14. $\int \frac{6 dx}{7x^2 + 56x + 84}$
15. $\int \frac{(6x - 6) dx}{3x^2 - 30x + 102}$
16. $\int \frac{(x^2 + 3) dx}{9 + 3x^2}$
17. $\int \frac{3x^2 dx}{10 - 8x^2}$
18. $\int \sqrt{x}(4 + 3x) dx$
19. $\int \sqrt{2 + 2x} dx$
20. $\int \frac{2 dx}{\sqrt{4x^2 + 8x + 4}}$
21. $\int \frac{4x dx}{\sqrt{3 + 10x^2}}$
22. $\int (3x + 3) \left(\sin(9x + 5) + \cos(9x + 5) \right) dx$
23. $\int 5 \sin^2(4x - 1) \cos^2(4x - 1) dx$
24. $\int \frac{4 \cos x dx}{1 - \cos(7x - 4)}$
25. $\int \frac{3 \sin(4x - 2) dx}{\sqrt{1 + 9 \sin^2(4x - 2)}}$
26. $\int \frac{9 dx}{\sin^2(8x - 6) \cos(8x - 6)}$
27. $\int \frac{2 \sin(4x - 5) dx}{\cos^2(4x - 5)}$
28. $\int \cos(7x + 7) \cos(2x - 2) dx$
29. $\int \operatorname{ctg}^3(4x + 3) dx$
30. $\int \operatorname{arctg}(4x - 4) dx$
31. $\int (2x - 4)e^{5x+4} dx$
32. $\int x \operatorname{sh}(6x - 5) dx$
33. $\int 3 \ln(5x + 4) dx$
34. $\int \frac{(5x^2 - 6x + 1) dx}{3x^2 + 33x + 90}$
35. $\int \frac{5 dx}{81 - x^4}$
36. $\int \frac{(2x + 3) dx}{(x^2 + 1x - 2)(x^2 - 3x - 10)}$
37. $\int \sqrt{6x^2 + 30x + 24} dx$
38. $\int \frac{-5x^2 - 3x - 52}{x^3 - 64} dx$
39. $\int \frac{2 dx}{x\sqrt{3 - 3x}}$
40. $\int 3x(6x + 7)^7 dx$

Вариант 116

1. $\int_1^7 \frac{x dx}{(3 + 5x)^2}$.
2. $\int_1^3 \frac{13 dx}{x^2(7 - 2x)}$.
3. $\int_3^5 \frac{9 dx}{x(9 + x^2)}$.
4. $\int_3^8 \frac{9x dx}{\sqrt{-3 + 4x}}$.
5. $\int_1^3 \frac{x^2 dx}{\sqrt{9 + x^2}}$.
6. $\int_5^6 \frac{18 dx}{100 - 25 \sin^2 x}$.
7. $\int_2^3 \frac{9 \cos(\frac{2x + 4}{5}) dx}{\sin(\frac{2x + 4}{5}) + \cos(\frac{2x + 4}{5})}$.
8. $\int_0^1 6 \operatorname{tg}^3(\frac{5x + 7}{4}) dx$.
9. $\int_2^6 16e^{-2x} \cos^2 x dx$.
10. $\int_2^6 x \ln(6 + 4x) dx$.
11. $\int (4x + 1)(6x + 2) dx$
12. $\int \frac{9 dx}{(5x + 7)^2}$
13. $\int \frac{dx}{(6x + 5)(8x + 4)}$
14. $\int \frac{4 dx}{3x^2 - 21x + 36}$
15. $\int \frac{(5x - 5) dx}{5x^2 - 20x + 100}$
16. $\int \frac{(x^2 + 3) dx}{2 + 7x^2}$
17. $\int \frac{6x^2 dx}{8 - 2x^2}$
18. $\int (6 - 2x^{2/4}) dx$
19. $\int \sqrt{\frac{2 + 5x}{8 + 1x}} dx$
20. $\int \frac{7 dx}{\sqrt{4x^2 - 40x + 96}}$
21. $\int \frac{5x dx}{\sqrt{9 + 2x^2}}$
22. $\int (4x + 3) \sin^2(3x - 2) dx$
23. $\int 6 \sin^3(8x - 5) \cos(8x - 5) dx$
24. $\int \frac{9 dx}{\cos(8x - 5)}$
25. $\int 2 \sin(2x + 2) \sqrt{1 + 3 \cos^2(2x + 2)} dx$
26. $\int \frac{9 dx}{\sin^3(5x - 3) \cos^3(5x - 3)}$
27. $\int \frac{8 \sin^2(5x + 5) dx}{\cos^4(5x + 5)}$
28. $\int \cos(2x - 6) \cos(9x + 3) dx$
29. $\int \operatorname{tg}^3(5x + 2) dx$
30. $\int x \arcsin(6x + 7) dx$
31. $\int e^{7x} \cos(3x + 5) dx$
32. $\int \operatorname{sh}(4x + 6) \operatorname{ch}(4x + 6) dx$
33. $\int (9x + 4) \ln(5x - 6) dx$
34. $\int \frac{(2x^2 + 1x - 7) dx}{4x^2 + 56x + 212}$
35. $\int \frac{2 dx}{512 - x^3}$
36. $\int \frac{(3x + 7) dx}{(x^2 - 2x - 35)(x^2 + 12x + 35)}$
37. $\int \sqrt{7x^2 - 14x - 21} dx$
38. $\int \frac{2x^2 + 0x + 12}{x^4 + 4x^2} dx$
39. $\int \frac{(6 + 6x) dx}{3 + \sqrt[3]{x}}$
40. $\int 9x(5x + 4)^{10} dx$

Вариант 117

1. $\int_3^9 \frac{x dx}{(3 + 4x)^2}$.
2. $\int_2^5 \frac{21 dx}{x^2(4 + 5x)}$.
3. $\int_2^4 \frac{x dx}{3x^2 - 2x - 6}$.
4. $\int_2^8 \frac{15 dx}{(9 + 36x)\sqrt{x^3}}$.
5. $\int_5^9 \frac{x^3 dx}{\sqrt{x^2 - 4}}$.
6. $\int_9^{10} \frac{25 dx}{36 + 25 \cos^2 x}$.
7. $\int_1^3 \frac{11 dx}{\sin^2(\frac{2x + 6}{9}) \cdot \cos(\frac{2x + 6}{9})}$.
8. $\int_0^1 4 \operatorname{tg}^4(\frac{3x + 2}{6}) dx$.
9. $\int_1^3 \frac{4 dx}{5 + 4e^{-2x}}$.
10. $\int_2^3 x^3 \ln(25 + x^2) dx$.
11. $\int (4x - 7)^2(7x - 5)^2 dx$
12. $\int \frac{5x dx}{(7x - 6)}$
13. $\int \frac{2 dx}{x(7x + 2)}$
14. $\int \frac{5 dx}{4x^2 + 4x - 24}$
15. $\int \frac{(2x + 6) dx}{2x^2 - 8x + 40}$
16. $\int \frac{(x^2 + 2) dx}{6 + 3x^2}$
17. $\int \frac{8x dx}{(4 - 9x^2)^2}$
18. $\int \frac{2 dx}{(4 + 5x)^{7/3}}$
19. $\int \sqrt{\frac{8 - 7x}{9 + 1x}} dx$
20. $\int \frac{3 dx}{\sqrt{6x^2 - 12x + 6}}$
21. $\int \frac{9x dx}{\sqrt{10x^2 + 10}}$
22. $\int (6x - 4) \cos(3x + 6) dx$
23. $\int 3 \sin^5(4x - 4) dx$
24. $\int \frac{8x dx}{1 - \sin(7x - 5)}$
25. $\int \frac{8 \sin(4x + 4) dx}{\sqrt{1 + 6 \sin^2(4x + 4)}}$
26. $\int \frac{5 dx}{\sin^2(8x + 4) \cos^2(8x + 4)}$
27. $\int \frac{5 \sin^2(4x - 4) dx}{\cos^4(4x - 4)}$
28. $\int \sin(2x + 2) \sin(6x - 4) dx$
29. $\int \operatorname{ctg}^2(3x + 4) dx$
30. $\int \operatorname{arcctg}(2x + 3) dx$
31. $\int (7x + 2)2^{6x-6} dx$
32. $\int x^2 \operatorname{sh}(3x - 4) dx$
33. $\int 4x^3 \ln(6x + 1) dx$
34. $\int \frac{(3x^2 - 6x - 1) dx}{4x^2 - 40x + 136}$
35. $\int \frac{5 dx}{16x^2 - x^4}$
36. $\int \frac{(5x + 6) dx}{(x^2 - 4x + 3)(x^2 + 3x - 18)}$
37. $\int \sqrt{-6x^2 - 48x + 120} dx$
38. $\int \frac{x^2 + 31x + 102}{x^3 - 216} dx$
39. $\int \frac{(4 + 4x) dx}{9 + \sqrt[3]{x}}$
40. $\int \frac{3x^2 dx}{(6x + 5)^5}$

Вариант 118

1. $\int_1^3 \frac{x dx}{(3 - 6x)^3}$.
2. $\int_2^5 \frac{10 dx}{x(4 - 6x)}$.
3. $\int_1^4 \frac{10 dx}{x^2(4 + x^2)}$.
4. $\int_1^5 \frac{8 dx}{(4 + 25x)\sqrt{x^3}}$.
5. $\int_5^8 \frac{x^2 dx}{\sqrt{x^2 - 1}}$.
6. $\int_2^3 \frac{19 dx}{81 + 25 \sin^2 x}$.
7. $\int_2^4 \frac{5 \operatorname{tg}(\frac{2x+2}{8}) dx}{1 + \cos(\frac{2x+2}{8})}$.
8. $\int_4^5 9 \operatorname{tg}^4(\frac{4x+6}{6}) dx$.
9. $\int_2^7 14e^{-1x} \sin^2 x dx$.
10. $\int_1^4 4 \sin(\ln(3x+8)) dx$.
11. $\int_1^4 (6x-5)(9x-3) dx$
12. $\int \frac{3 dx}{(7x+2)^3}$
13. $\int \frac{4 dx}{x(7x-5)}$
14. $\int \frac{2 dx}{4x^2 + 16x + 116}$
15. $\int \frac{(2x+6) dx}{2x^2 - 8x + 40}$
16. $\int \frac{4x dx}{(2+3x^2)^2}$
17. $\int \frac{7x dx}{9-10x^2}$
18. $\int (3 - 6\sqrt{x})(4 + 4\sqrt{x}) dx$
19. $\int \sqrt{\frac{8-7x}{9+1x}} dx$
20. $\int \frac{6 dx}{x\sqrt{7280x^2 - 1120x + 5}}$
21. $\int \sqrt{7x^2 - 11} dx$
22. $\int (6x - 4) \sin(4x - 2) dx$
23. $\int 8 \cos^4(2x - 1) dx$
24. $\int \frac{8x dx}{1 + \sin(4x - 5)}$
25. $\int \frac{4 dx}{7 + 4 \sin^2(6x + 1)}$
26. $\int \frac{9 dx}{\sin^2(8x + 4) \cos^2(8x + 4)}$
27. $\int \frac{3 \sin^2(6x + 7) dx}{\cos(6x + 7)}$
28. $\int \sin(5x - 7) \cos(4x - 2) dx$
29. $\int \operatorname{tg}^2(5x + 1) dx$
30. $\int x \operatorname{arctg}(7x + 7) dx$
31. $\int e^{4x} \cos^2(2x - 1) dx$
32. $\int x^2 \operatorname{ch}(6x - 3) dx$
33. $\int (8x + 4) \ln(3x - 5) dx$
34. $\int \frac{(2x^2 + 6x + 5) dx}{2x^2 - 28x + 116}$
35. $\int \frac{2 dx}{125 + x^3}$
36. $\int \frac{(5x + 6) dx}{(x^2 + 3x + 2)(x^2 + 8x + 12)}$
37. $\int \sqrt{7x^2 - 84x + 259} dx$
38. $\int \frac{8x^2 - 35x + 0}{x^4 - 6x^3} dx$
39. $\int \frac{7 dx}{x\sqrt{6-3x}}$
40. $\int \frac{2x^2 dx}{(3x-4)^{11}}$

Вариант 119

1. $\int_2^7 \frac{x^2 dx}{(4-4x)^2}$.
2. $\int_2^8 \frac{11dx}{x^2(3+5x)}$.
3. $\int_2^6 \frac{11dx}{x(25+x^2)}$.
4. $\int_3^7 \frac{14 dx}{x\sqrt{1+7x}}$.
5. $\int_1^4 \frac{x^3 dx}{\sqrt{81-x^2}}$.
6. $\int_2^3 \frac{22 dx}{4+36\sin^2 x}$.
7. $\int_2^3 \frac{9 \cos(\frac{2x+4}{5}) dx}{\sin(\frac{2x+4}{5}) + \cos(\frac{2x+4}{5})}$.
8. $\int_0^1 \frac{9 dx}{\operatorname{tg}(\frac{2x+3}{7}) + 1}$.
9. $\int_2^3 18e^{1x} \cos^2 x dx$.
10. $\int_1^7 x \ln(3+4x) dx$.
11. $\int_1^1 (5x+5)^n dx$
12. $\int \frac{2x dx}{(4x-4)^3}$
13. $\int \frac{2x dx}{(8x-4)^2}$
14. $\int \frac{2 dx}{6x^2 - 66x + 180}$
15. $\int \frac{(2x-3) dx}{6x^2 - 24x + 24}$
16. $\int \frac{3x dx}{(7+10x^2)^2}$
17. $\int \frac{(4x^2+3) dx}{7-9x^2}$
18. $\int \sqrt{x^3}(6-4\sqrt{x}) dx$
19. $\int \sqrt{\frac{6x-6}{9x+5}} dx$
20. $\int \frac{2 dx}{\sqrt{2x^2 - 22x + 60}}$
21. $\int \frac{9x dx}{\sqrt{4x^2 - 8}}$
22. $\int (4x-1) (\sin(9x-3) + \cos(9x-3)) dx$
23. $\int 4 \cos^3(5x+1) dx$
24. $\int \frac{7 \cos x dx}{1 + \cos(2x-2)}$
25. $\int \frac{2 dx}{2 - 6 \sin(8x-2)}$
26. $\int \frac{\sin^3(7x-4) \cos^3(7x-4)}{4 \cos^3(7x-4) dx}$
27. $\int \frac{4 \cos^3(7x-4) dx}{\sin(7x-4)}$
28. $\int \sin(6x-6) \sin(4x-3) dx$
29. $\int \operatorname{ctg}^2(8x+4) dx$
30. $\int x \arccos(2x-4) dx$
31. $\int (6x+2)e^{8x-2} dx$
32. $\int x^2 \operatorname{ch}(3x+2) dx$
33. $\int 2 \ln(4x-2) dx$
34. $\int \frac{(3x^2+6x-2) dx}{5x^2 - 55x + 150}$
35. $\int \frac{(5x+3) dx}{16-x^4}$
36. $\int \frac{(2x-4) dx}{(x^2-1x-30)(x^2+1x-42)}$
37. $\int \sqrt{7x^2+98x+343} dx$
38. $\int \frac{10x^2+16x-270}{x^4-50x^2+625} dx$
39. $\int \frac{(2+1x) dx}{4+\sqrt[3]{x}}$
40. $\int \frac{5x dx}{(4x+4)^5}$

Вариант 120

1. $\int_3^6 \frac{x dx}{(7 + 3x)^3}$.
2. $\int_1^5 \frac{16 dx}{x(6 + 6x)^2}$.
3. $\int_3^6 \frac{8 dx}{x^2(9 + x^2)}$.
4. $\int_3^6 \frac{11 dx}{(16 - 25x)\sqrt{x^3}}$.
5. $\int_5^7 \frac{x^2 dx}{\sqrt{x^2 - 1}}$.
6. $\int_5^6 \frac{24 dx}{100 + 49 \cos^2 x}$.
7. $\int_0^2 \frac{7 dx}{\sin(\frac{5x + 3}{9}) \cdot \cos^2(\frac{5x + 3}{9})}$.
8. $\int_{-1}^0 4 \operatorname{tg}^4(\frac{2x + 7}{8}) dx$.
9. $\int_1^4 17e^{-3x} \cos^2 x dx$.
10. $\int_3^7 \frac{\ln(7 + 8x) dx}{x^2}$.
11. $\int x(3x + 2)(2x - 2) dx$
12. $\int \frac{8 dx}{(6x + 2)^3}$
13. $\int \frac{7x^2 dx}{(5x - 6)^5}$
14. $\int \frac{5 dx}{7x^2 - 56x + 112}$
15. $\int \frac{(4x - 1) dx}{4x^2 + 32x + 164}$
16. $\int \frac{7x^2 dx}{6 + 3x^2}$
17. $\int \frac{2x^2 dx}{10 - 4x^2}$
18. $\int \sqrt{x}(2 - 4x) dx$
19. $\int \frac{3x dx}{\sqrt{7 - 4x}}$
20. $\int \frac{4 dx}{x\sqrt{-60x^2 + 3x + 2}}$
21. $\int \frac{5x dx}{\sqrt{9 + 2x^2}}$
22. $\int 2x^2 \cos(7x + 4) dx$
23. $\int 7 \sin^3(4x - 1) dx$
24. $\int \frac{7 \sin x dx}{1 + \sin(4x + 4)}$
25. $\int 9 \sin(4x + 6) \sqrt{1 + 2 \sin^2(4x + 6)} dx$
26. $\int \frac{8 dx}{\sin(6x - 6) \cos(6x - 6)}$
27. $\int \frac{6 \cos(7x + 7) dx}{\sin^3(7x + 7)}$
28. $\int \cos(5x - 5) \cos(4x + 1) dx$
29. $\int \operatorname{ctg}^4(7x + 3) dx$
30. $\int x \arcsin(6x - 1) dx$
31. $\int \frac{7 dx}{3 + e^{-1x}}$
32. $\int \frac{x dx}{\operatorname{ch}^2(3x - 3)}$
33. $\int 7x^2 \ln(6x + 4) dx$
34. $\int \frac{(4x^2 + 2x - 5) dx}{5x^2 - 40x + 260}$
35. $\int \frac{2 dx}{125 + x^3}$
36. $\int \frac{(4x - 6) dx}{(x^2 + 11x + 28)(x^2 + 9x + 20)}$
37. $\int \sqrt{-2x^2 - 16x - 14} dx$
38. $\int \frac{9x^2 - 25x - 360}{x^4 - 36x^2} dx$
39. $\int \frac{8x^{7/2} - 5x^{4/3} + 7}{\sqrt{x}} dx$
40. $\int 8x(3x + 2)^5 dx$

Библиографический список

1. Кузнецов, Л.А. Сборник заданий по высшей математике [Текст]\Л.А.Кузнецов.–М.:Высшая школа, 1994.–175с.
2. Мироненко, Е.С. Высшая математика [Текст]\Е.С.Мироненко.–М.:Высшая школа,1998.–110с.
3. Двайт Г.Б. Таблицы интегралов и другие математические формулы [Текст]\Г.Б. Двайт.–М.:Наука, 1966.–228 с.

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Неопределенные и определенные интегралы

Сетевое обновляемое электронное учебное пособие

В авторской редакции

Электронный формат – pdf

Печ. л. 8.0.

Издательство Липецкого государственного технического университета.

398600 Липецк, ул. Московская, 30.

Информационный портал

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