

Вариант № 11

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

Вариант № 12

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

Вариант № 13

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

Вариант № 14

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

Вариант № 15

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