

Individual exercises. Variant 1. Find indefinite integrals

1. $\int \cos 7x dx$; $\int (3x-5)^6 dx$; $\int \sqrt{2x+3} dx$; $\int e^{-2x} dx$; $\int \frac{dx}{9x^2+4}$; $\int \frac{dx}{4x^2-9}$;
 $\int \frac{dx}{\sqrt{4x^2-9}}$; $\int \frac{dx}{\sqrt{9-4x^2}}$.
2. $\int \frac{dx}{x(5+\ln x)}$; $\int \frac{x^2 dx}{5-x^3}$; $\int \frac{2x+7}{x^2+7x-3} dx$; $\int x e^{-5x^2} dx$.
3. $\int (x+2) \cos x dx$; $\int x^7 \ln x dx$
4. $\int \frac{(x+5) dx}{x^2-7x+6}$;

Individual exercises. Variant 2. Find indefinite integrals

1. $\int (2x-5)^7 dx$; $\int \sqrt[5]{2x+1} dx$; $\int e^{-7x} dx$; $\int \operatorname{tg} 3x dx$; $\int \frac{dx}{9x^2+16}$; $\int \frac{dx}{9x^2-16}$;
 $\int \frac{dx}{\sqrt{9x^2+16}}$; $\int \frac{dx}{\sqrt{16-9x^2}}$.
2. $\int \frac{dx}{x \ln^2 x}$; $\int \frac{dx}{\sqrt{1-x^2} \arcsin^3 x}$; $\int \frac{14x+6}{7x^2+6x-1} dx$; $\int \frac{\operatorname{arctg}^5 x dx}{1+x^2}$;
3. $\int \arcsin x dx$; $\int x \cos 2x dx$; .
4. $\int \frac{(x+4) dx}{x^2-4x+3}$;

Individual exercises. Variant 3. Find indefinite integrals

1. $\int \cos(4x-1) dx$; $\int (7x+1)^9 dx$; $\int e^{-3x+1} dx$; $\int \frac{dx}{6x+7}$; $\int \frac{dx}{4x^2-25}$;
 $\int \frac{dx}{4x^2+81}$; $\int \frac{dx}{\sqrt{4x^2+25}}$; $\int \frac{dx}{\sqrt{49-4x^2}}$
2. $\int \frac{x^8 dx}{7+3x^9}$; $\int \frac{(2x+6) dx}{x^2+6x-9}$; $\int \frac{dx}{x \ln^3 x}$; $\int x \cdot 3^{x^2} dx$;
3. $\int 3x \cos 2x dx$; $\int x e^{-5x} dx$;
4. $\int \frac{(x+3) dx}{x^2-3x+2}$;

Individual exercises. Variant 4. Find indefinite integrals

$$1. \int \sin(7x+1)dx; \int (5x-7)^{10} dx; \int e^{3x} dx; \int \frac{dx}{(4x+1)^5}; \int \frac{dx}{\sqrt{16-81x^2}};$$

$$\int \frac{dx}{16x^2+9}; \int \frac{dx}{\sqrt{9x^2+16}}; \int \frac{dx}{25x^2-9}.$$

$$2. \int \frac{\ln^3 x dx}{x}; \int e^{\sin x} \cos x dx; \int x^3 e^{-x^4} dx; \int \frac{\operatorname{arccotg}^5 x dx}{1+x^2};$$

$$3. \int x3^x dx; \int \arccos x dx;$$

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

Individual exercises. Variant 5. Find indefinite integrals

$$1. \int (7-9x)^{12} dx; \int \sin 4x dx; \int e^{1-6x} dx; \int \frac{dx}{6-5x}; \int \frac{dx}{4x^2+9}; \int \frac{dx}{49-25x^2};$$

$$\int \frac{dx}{\sqrt{4x^2-9}}; \int \frac{dx}{\sqrt{16-25x^2}}.$$

$$2. \int \frac{(4x+3)dx}{2x^2+3x-7}; \int x^3 e^{-x^4} dx; \int \frac{dx}{x \ln^2 x}; \int \frac{e^x dx}{e^{2x}-81}.$$

$$3. \int x e^{-3x} dx; \int \frac{\ln x}{x^2} dx;$$

$$4. \int \frac{(x+1)dx}{x^2-8x+7};$$

Individual exercises. Variant 6. Find indefinite integrals

$$1. \int \sqrt[3]{3+5x} dx; \int e^{-5x} dx; \int \sin(5x-1) dx; \int \frac{dx}{3-2x}; \int \frac{dx}{36x^2+9}; \int \frac{dx}{36x^2-9};$$

$$\int \frac{dx}{\sqrt{16x^2-1}}; \int \frac{dx}{\sqrt{1-16x^2}}.$$

$$2. \int \frac{(10x-8)dx}{5x^2-8x+7}; \int \frac{dx}{x \ln^3 x}; \int x^2 \cdot 4^{x^3} dx; \int \frac{e^x dx}{e^{2x}+4};$$

$$3. \int x e^{-2x} dx; \int (x-4) \sin x dx.$$

$$4. \int \frac{(x+4)dx}{x^2-9x+8};$$

Individual exercises. Variant 7. Find indefinite integrals

1. $\int \sin(3x+1)dx$; $\int (2x-1)^5 dx$; $\int e^{2-3x} dx$; $\int \frac{dx}{3x+4}$; $\int \frac{dx}{9x^2-1}$; $\int \frac{dx}{9x^2+1}$;
 $\int \frac{dx}{\sqrt{9x^2-1}}$; $\int \frac{dx}{\sqrt{1-9x^2}}$.
2. $\int \frac{x^5 dx}{4+5x^6}$; $\int \frac{e^x dx}{e^{2x}-9}$; $\int \frac{dx}{x \ln^4 x}$; $\int x(3x^2+2)^5 dx$.
3. $\int x2^x dx$; $\int x \cos 2x dx$;
4. $\int \frac{(x+2)dx}{x^2-10x+9}$;

Individual exercises. Variant 8. Find indefinite integrals

1. $\int (6-7x)^7 dx$; $\int e^{-6x} dx$; $\int \sin(4x+1)dx$; $\int \frac{dx}{5+2x}$; $\int \frac{dx}{4x^2+49}$;
 $\int \frac{dx}{4x^2-49}$; $\int \frac{dx}{\sqrt{4x^2-49}}$; $\int \frac{dx}{\sqrt{49-4x^2}}$.
2. $\int \frac{(8x-7)dx}{4x^2-7x+8}$; $\int \frac{dx}{x \ln^7 x}$; $\int x8^{x^2} dx$; $\int x^3 e^{-x^4} dx$;
3. $\int x \cos 6x dx$; $\int \frac{\ln x}{x^3} dx$.
4. $\int \frac{(x+3)dx}{x^2-6x+5}$;

Individual exercises. Variant 9. Find indefinite integrals

1. $\int \sqrt{4x+1} dx$; $\int e^{-7x+1} dx$; $\int \frac{dx}{\cos^2 2x}$; $\int \frac{dx}{(3x-7)^2}$; $\int \frac{dx}{49x^2+4}$; $\int \frac{dx}{\sqrt{49x^2+1}}$;
 $\int \frac{dx}{\sqrt{16-49x^2}}$; $\int \frac{dx}{49x^2-1}$.
2. $\int \frac{(12x-16)dx}{3x^2-8x+1}$; $\int \frac{\ln^4 x dx}{x}$; $\int x^2 e^{-4x^3} dx$; $\int \frac{x^3 dx}{2-9x^4}$;
3. $\int x^2 \ln x dx$; $\int x \cos 5x dx$.
4. $\int \frac{(x+5)dx}{x^2-7x+6}$;

Individual exercises. Variant 10. Find indefinite integrals

1. $\int (2x-7)^8 dx$; $\int e^{-3x+2} dx$; $\int \cos 2x dx$; $\int 2^{-x} dx$; $\int \frac{dx}{6x^2+9}$; $\int \frac{dx}{25x^2-4}$;
 $\int \frac{dx}{\sqrt{49x^2-4}}$; $\int \frac{dx}{\sqrt{4-49x^2}}$.
2. $\int \frac{x^6 dx}{3+x^7}$; $\int \frac{(2x-2)dx}{(x^2-2x+3)^2}$; $\int \frac{e^x dx}{e^{2x}+16}$; $\int \frac{dx}{x \ln^5 x}$;
3. $\int \operatorname{arctg} x dx$; $\int x \sin 4x dx$
4. $\int \frac{(x+2)dx}{x^2-5x+4}$

Individual exercises. Variant 11. Find indefinite integrals

1. $\int 3^{2x} dx$; $\int e^{6-2x} dx$; $\int \sin(5+2x) dx$; $\int \frac{dx}{3x-1}$; $\int \frac{dx}{9x^2+16}$; $\int \frac{dx}{4x^2-81}$;
 $\int \frac{dx}{\sqrt{4x^2-1}}$; $\int \frac{dx}{\sqrt{1-4x^2}}$.
2. $\int \frac{\arcsin^7 x dx}{\sqrt{1-x^2}}$; $\int \frac{(6x+8)dx}{3x^2+8x-5}$; $\int \frac{dx}{x \ln^7 x}$; $\int \frac{e^x dx}{e^{2x}-4}$.
3. $\int x \sin 4x dx$; $\int x^5 \ln x dx$;
4. $\int \frac{(x+3)dx}{x^2-3x+2}$;

Individual exercises. Variant 12. Find indefinite integrals

1. $\int (5x+7)^2 dx$; $\int 3^{-x} dx$; $\int \sqrt{6x-1} dx$; $\int \frac{dx}{7-2x}$; $\int \frac{dx}{4x^2+81}$; $\int \frac{dx}{49x^2-16}$;
 $\int \frac{dx}{\sqrt{16x^2-9}}$; $\int \frac{dx}{\sqrt{9-16x^2}}$.
2. $\int \frac{xdx}{\sqrt{8x^2+5}}$; $\int \frac{e^x dx}{e^{2x}+4}$; $\int \frac{(2x-3)dx}{x^2-3x+5}$; $\int \frac{x^2 dx}{9+x^6}$; $\int x(6x^2+5)^9 dx$
3. $\int x^4 \ln x dx$; $\int x e^{-3x} dx$
4. $\int \frac{(x+1)dx}{x^2-8x+7}$;

Individual exercises. Variant 13. Find indefinite integrals

1. $\int \cos 7x dx$; $\int (3x-5)^6 dx$; $\int \sqrt{2x+3} dx$; $\int e^{-2x} dx$; $\int \frac{dx}{9x^2+4}$; $\int \frac{dx}{4x^2-9}$;
 $\int \frac{dx}{\sqrt{4x^2-9}}$; $\int \frac{dx}{\sqrt{9-4x^2}}$.
2. $\int \frac{dx}{x(5+\ln x)}$; $\int \frac{x^2 dx}{5-x^3}$; $\int \frac{2x+7}{x^2+7x-3} dx$; $\int x e^{-5x^2} dx$.
3. $\int (x+2) \cos x dx$; $\int x^7 \ln x dx$
4. $\int \frac{(x+5) dx}{x^2-7x+6}$;

Individual exercises. Variant 14. Find indefinite integrals

1. $\int (2x-5)^7 dx$; $\int \sqrt[5]{2x+1} dx$; $\int e^{-7x} dx$; $\int \operatorname{tg} 3x dx$; $\int \frac{dx}{9x^2+16}$; $\int \frac{dx}{9x^2-16}$;
 $\int \frac{dx}{\sqrt{9x^2+16}}$; $\int \frac{dx}{\sqrt{16-9x^2}}$.
2. $\int \frac{dx}{x \ln^2 x}$; $\int \frac{dx}{\sqrt{1-x^2} \arcsin^3 x}$; $\int \frac{14x+6}{7x^2+6x-1} dx$; $\int \frac{\operatorname{arctg}^5 x dx}{1+x^2}$;
3. $\int \arcsin x dx$; $\int x \cos 2x dx$; .
4. $\int \frac{(x+4) dx}{x^2-4x+3}$;

Individual exercises. Variant 15. Find indefinite integrals

1. $\int \cos(4x-1) dx$; $\int (7x+1)^9 dx$; $\int e^{-3x+1} dx$; $\int \frac{dx}{6x+7}$; $\int \frac{dx}{4x^2-25}$;
 $\int \frac{dx}{4x^2+81}$; $\int \frac{dx}{\sqrt{4x^2+25}}$; $\int \frac{dx}{\sqrt{49-4x^2}}$
2. $\int \frac{x^8 dx}{7+3x^9}$; $\int \frac{(2x+6) dx}{x^2+6x-9}$; $\int \frac{dx}{x \ln^3 x}$; $\int x \cdot 3^{x^2} dx$;
3. $\int 3x \cos 2x dx$; $\int x e^{-5x} dx$;
4. $\int \frac{(x+3) dx}{x^2-3x+2}$;

Individual exercises. Variant 16. Find indefinite integrals

$$1. \int \sin(7x+1)dx; \int (5x-7)^{10} dx; \int e^{3x} dx; \int \frac{dx}{(4x+1)^5}; \int \frac{dx}{\sqrt{16-81x^2}};$$

$$\int \frac{dx}{16x^2+9}; \int \frac{dx}{\sqrt{9x^2+16}}; \int \frac{dx}{25x^2-9}.$$

$$2. \int \frac{\ln^3 x dx}{x}; \int e^{\sin x} \cos x dx; \int x^3 e^{-x^4} dx; \int \frac{\operatorname{arccotg}^5 x dx}{1+x^2};$$

$$3. \int x3^x dx; \int \arccos x dx;$$

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

Individual exercises. Variant 17. Find indefinite integrals

$$1. \int (7-9x)^{12} dx; \int \sin 4x dx; \int e^{1-6x} dx; \int \frac{dx}{6-5x}; \int \frac{dx}{4x^2+9}; \int \frac{dx}{49-25x^2};$$

$$\int \frac{dx}{\sqrt{4x^2-9}}; \int \frac{dx}{\sqrt{16-25x^2}}.$$

$$2. \int \frac{(4x+3)dx}{2x^2+3x-7}; \int x^3 e^{-x^4} dx; \int \frac{dx}{x \ln^2 x}; \int \frac{e^x dx}{e^{2x}-81}.$$

$$3. \int x e^{-3x} dx; \int \frac{\ln x}{x^2} dx;$$

$$4. \int \frac{(x+1)dx}{x^2-8x+7};$$

Individual exercises. Variant 18. Find indefinite integrals

$$1. \int \sqrt[3]{3+5x} dx; \int e^{-5x} dx; \int \sin(5x-1) dx; \int \frac{dx}{3-2x}; \int \frac{dx}{36x^2+9}; \int \frac{dx}{36x^2-9};$$

$$\int \frac{dx}{\sqrt{16x^2-1}}; \int \frac{dx}{\sqrt{1-16x^2}}.$$

$$2. \int \frac{(10x-8)dx}{5x^2-8x+7}; \int \frac{dx}{x \ln^3 x}; \int x^2 \cdot 4^{x^3} dx; \int \frac{e^x dx}{e^{2x}+4};$$

$$3. \int x e^{-2x} dx; \int (x-4) \sin x dx.$$

$$4. \int \frac{(x+4)dx}{x^2-9x+8};$$

Individual exercises. Variant 19. Find indefinite integrals

1. $\int \sin(3x+1)dx$; $\int (2x-1)^5 dx$; $\int e^{2-3x} dx$; $\int \frac{dx}{3x+4}$; $\int \frac{dx}{9x^2-1}$; $\int \frac{dx}{9x^2+1}$;
 $\int \frac{dx}{\sqrt{9x^2-1}}$; $\int \frac{dx}{\sqrt{1-9x^2}}$.
2. $\int \frac{x^5 dx}{4+5x^6}$; $\int \frac{e^x dx}{e^{2x}-9}$; $\int \frac{dx}{x \ln^4 x}$; $\int x(3x^2+2)^5 dx$.
3. $\int x2^x dx$; $\int x \cos 2x dx$;
4. $\int \frac{(x+2)dx}{x^2-10x+9}$;

Individual exercises. Variant 20. Find indefinite integrals

1. $\int (6-7x)^7 dx$; $\int e^{-6x} dx$; $\int \sin(4x+1)dx$; $\int \frac{dx}{5+2x}$; $\int \frac{dx}{4x^2+49}$;
 $\int \frac{dx}{4x^2-49}$; $\int \frac{dx}{\sqrt{4x^2-49}}$; $\int \frac{dx}{\sqrt{49-4x^2}}$.
2. $\int \frac{(8x-7)dx}{4x^2-7x+8}$; $\int \frac{dx}{x \ln^7 x}$; $\int x8^{x^2} dx$; $\int x^3 e^{-x^4} dx$;
3. $\int x \cos 6x dx$; $\int \frac{\ln x}{x^3} dx$.
4. $\int \frac{(x+3)dx}{x^2-6x+5}$;

Individual exercises. Variant 21. Find indefinite integrals

1. $\int \sqrt{4x+1} dx$; $\int e^{-7x+1} dx$; $\int \frac{dx}{\cos^2 2x}$; $\int \frac{dx}{(3x-7)^2}$; $\int \frac{dx}{49x^2+4}$; $\int \frac{dx}{\sqrt{49x^2+1}}$;
 $\int \frac{dx}{\sqrt{16-49x^2}}$; $\int \frac{dx}{49x^2-1}$.
2. $\int \frac{(12x-16)dx}{3x^2-8x+1}$; $\int \frac{\ln^4 x dx}{x}$; $\int x^2 e^{-4x^3} dx$; $\int \frac{x^3 dx}{2-9x^4}$;
3. $\int x^2 \ln x dx$; $\int x \cos 5x dx$.
4. $\int \frac{(x+5)dx}{x^2-7x+6}$;

Individual exercises. Variant 22. Find indefinite integrals

1. $\int (2x-7)^8 dx$; $\int e^{-3x+2} dx$; $\int \cos 2x dx$; $\int 2^{-x} dx$; $\int \frac{dx}{6x^2+9}$; $\int \frac{dx}{25x^2-4}$;
 $\int \frac{dx}{\sqrt{49x^2-4}}$; $\int \frac{dx}{\sqrt{4-49x^2}}$.
2. $\int \frac{x^6 dx}{3+x^7}$; $\int \frac{(2x-2)dx}{(x^2-2x+3)^2}$; $\int \frac{e^x dx}{e^{2x}+16}$; $\int \frac{dx}{x \ln^5 x}$;
3. $\int \operatorname{arctg} x dx$; $\int x \sin 4x dx$
4. $\int \frac{(x+2)dx}{x^2-5x+4}$

Individual exercises. Variant 23. Find indefinite integrals

1. $\int 3^{2x} dx$; $\int e^{6-2x} dx$; $\int \sin(5+2x) dx$; $\int \frac{dx}{3x-1}$; $\int \frac{dx}{9x^2+16}$; $\int \frac{dx}{4x^2-81}$;
 $\int \frac{dx}{\sqrt{4x^2-1}}$; $\int \frac{dx}{\sqrt{1-4x^2}}$.
2. $\int \frac{\arcsin^7 x dx}{\sqrt{1-x^2}}$; $\int \frac{(6x+8)dx}{3x^2+8x-5}$; $\int \frac{dx}{x \ln^7 x}$; $\int \frac{e^x dx}{e^{2x}-4}$.
3. $\int x \sin 4x dx$; $\int x^5 \ln x dx$;
4. $\int \frac{(x+3)dx}{x^2-3x+2}$;

Individual exercises. Variant 24. Find indefinite integrals

1. $\int (5x+7)^2 dx$; $\int 3^{-x} dx$; $\int \sqrt{6x-1} dx$; $\int \frac{dx}{7-2x}$; $\int \frac{dx}{4x^2+81}$; $\int \frac{dx}{49x^2-16}$;
 $\int \frac{dx}{\sqrt{16x^2-9}}$; $\int \frac{dx}{\sqrt{9-16x^2}}$.
2. $\int \frac{xdx}{\sqrt{8x^2+5}}$; $\int \frac{e^x dx}{e^{2x}+4}$; $\int \frac{(2x-3)dx}{x^2-3x+5}$; $\int \frac{x^2 dx}{9+x^6}$; $\int x(6x^2+5)^9 dx$
3. $\int x^4 \ln x dx$; $\int x e^{-3x} dx$
4. $\int \frac{(x+1)dx}{x^2-8x+7}$;

Individual exercises. Variant 25. Find indefinite integrals

1. $\int \cos 7x dx$; $\int (3x-5)^6 dx$; $\int \sqrt{2x+3} dx$; $\int e^{-2x} dx$; $\int \frac{dx}{9x^2+4}$; $\int \frac{dx}{4x^2-9}$;
 $\int \frac{dx}{\sqrt{4x^2-9}}$; $\int \frac{dx}{\sqrt{9-4x^2}}$.
2. $\int \frac{dx}{x(5+\ln x)}$; $\int \frac{x^2 dx}{5-x^3}$; $\int \frac{2x+7}{x^2+7x-3} dx$; $\int x e^{-5x^2} dx$.
3. $\int (x+2) \cos x dx$; $\int x^7 \ln x dx$
4. $\int \frac{(x+5) dx}{x^2-7x+6}$;

Individual exercises. Variant 26. Find indefinite integrals

1. $\int (2x-5)^7 dx$; $\int \sqrt[5]{2x+1} dx$; $\int e^{-7x} dx$; $\int \operatorname{tg} 3x dx$; $\int \frac{dx}{9x^2+16}$; $\int \frac{dx}{9x^2-16}$;
 $\int \frac{dx}{\sqrt{9x^2+16}}$; $\int \frac{dx}{\sqrt{16-9x^2}}$.
2. $\int \frac{dx}{x \ln^2 x}$; $\int \frac{dx}{\sqrt{1-x^2} \arcsin^3 x}$; $\int \frac{14x+6}{7x^2+6x-1} dx$; $\int \frac{\operatorname{arctg}^5 x dx}{1+x^2}$;
3. $\int \arcsin x dx$; $\int x \cos 2x dx$; .
4. $\int \frac{(x+4) dx}{x^2-4x+3}$;

Individual exercises. Variant 27. Find indefinite integrals

1. $\int \cos(4x-1) dx$; $\int (7x+1)^9 dx$; $\int e^{-3x+1} dx$; $\int \frac{dx}{6x+7}$; $\int \frac{dx}{4x^2-25}$;
 $\int \frac{dx}{4x^2+81}$; $\int \frac{dx}{\sqrt{4x^2+25}}$; $\int \frac{dx}{\sqrt{49-4x^2}}$
2. $\int \frac{x^8 dx}{7+3x^9}$; $\int \frac{(2x+6) dx}{x^2+6x-9}$; $\int \frac{dx}{x \ln^3 x}$; $\int x \cdot 3^{x^2} dx$;
3. $\int 3x \cos 2x dx$; $\int x e^{-5x} dx$;
4. $\int \frac{(x+3) dx}{x^2-3x+2}$;

Individual exercises. Variant 28. Find indefinite integrals

$$1. \int \sin(7x+1)dx; \int (5x-7)^{10} dx; \int e^{3x} dx; \int \frac{dx}{(4x+1)^5}; \int \frac{dx}{\sqrt{16-81x^2}};$$

$$\int \frac{dx}{16x^2+9}; \int \frac{dx}{\sqrt{9x^2+16}}; \int \frac{dx}{25x^2-9}.$$

$$2. \int \frac{\ln^3 x dx}{x}; \int e^{\sin x} \cos x dx; \int x^3 e^{-x^4} dx; \int \frac{\operatorname{arccotg}^5 x dx}{1+x^2};$$

$$3. \int x3^x dx; \int \arccos x dx;$$

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

Individual exercises. Variant 29. Find indefinite integrals

$$1. \int (7-9x)^{12} dx; \int \sin 4x dx; \int e^{1-6x} dx; \int \frac{dx}{6-5x}; \int \frac{dx}{4x^2+9}; \int \frac{dx}{49-25x^2};$$

$$\int \frac{dx}{\sqrt{4x^2-9}}; \int \frac{dx}{\sqrt{16-25x^2}}.$$

$$2. \int \frac{(4x+3)dx}{2x^2+3x-7}; \int x^3 e^{-x^4} dx; \int \frac{dx}{x \ln^2 x}; \int \frac{e^x dx}{e^{2x}-81}.$$

$$3. \int x e^{-3x} dx; \int \frac{\ln x}{x^2} dx;$$

$$4. \int \frac{(x+1)dx}{x^2-8x+7};$$

Individual exercises. Variant 30. Find indefinite integrals

$$1. \int \sqrt[3]{3+5x} dx; \int e^{-5x} dx; \int \sin(5x-1)dx; \int \frac{dx}{3-2x}; \int \frac{dx}{36x^2+9}; \int \frac{dx}{36x^2-9};$$

$$\int \frac{dx}{\sqrt{16x^2-1}}; \int \frac{dx}{\sqrt{1-16x^2}}.$$

$$2. \int \frac{(10x-8)dx}{5x^2-8x+7}; \int \frac{dx}{x \ln^3 x}; \int x^2 \cdot 4^{x^3} dx; \int \frac{e^x dx}{e^{2x}+4};$$

$$3. \int x e^{-2x} dx; \int (x-4) \sin x dx.$$

$$4. \int \frac{(x+4)dx}{x^2-9x+8};$$

Individual exercises. Variant 31. Find indefinite integrals

1. $\int \sin(3x+1)dx$; $\int (2x-1)^5 dx$; $\int e^{2-3x} dx$; $\int \frac{dx}{3x+4}$; $\int \frac{dx}{9x^2-1}$; $\int \frac{dx}{9x^2+1}$;
 $\int \frac{dx}{\sqrt{9x^2-1}}$; $\int \frac{dx}{\sqrt{1-9x^2}}$.
2. $\int \frac{x^5 dx}{4+5x^6}$; $\int \frac{e^x dx}{e^{2x}-9}$; $\int \frac{dx}{x \ln^4 x}$; $\int x(3x^2+2)^5 dx$.
3. $\int x2^x dx$; $\int x \cos 2x dx$;
4. $\int \frac{(x+2)dx}{x^2-10x+9}$;

Individual exercises. Variant 32. Find indefinite integrals

1. $\int (6-7x)^7 dx$; $\int e^{-6x} dx$; $\int \sin(4x+1)dx$; $\int \frac{dx}{5+2x}$; $\int \frac{dx}{4x^2+49}$;
 $\int \frac{dx}{4x^2-49}$; $\int \frac{dx}{\sqrt{4x^2-49}}$; $\int \frac{dx}{\sqrt{49-4x^2}}$.
2. $\int \frac{(8x-7)dx}{4x^2-7x+8}$; $\int \frac{dx}{x \ln^7 x}$; $\int x8^{x^2} dx$; $\int x^3 e^{-x^4} dx$;
3. $\int x \cos 6x dx$; $\int \frac{\ln x}{x^3} dx$.
4. $\int \frac{(x+3)dx}{x^2-6x+5}$;

Individual exercises. Variant 33. Find indefinite integrals

1. $\int \sqrt{4x+1} dx$; $\int e^{-7x+1} dx$; $\int \frac{dx}{\cos^2 2x}$; $\int \frac{dx}{(3x-7)^2}$; $\int \frac{dx}{49x^2+4}$; $\int \frac{dx}{\sqrt{49x^2+1}}$;
 $\int \frac{dx}{\sqrt{16-49x^2}}$; $\int \frac{dx}{49x^2-1}$.
2. $\int \frac{(12x-16)dx}{3x^2-8x+1}$; $\int \frac{\ln^4 x dx}{x}$; $\int x^2 e^{-4x^3} dx$; $\int \frac{x^3 dx}{2-9x^4}$;
3. $\int x^2 \ln x dx$; $\int x \cos 5x dx$.
4. $\int \frac{(x+5)dx}{x^2-7x+6}$;

Individual exercises. Variant 34. Find indefinite integrals

1. $\int (2x-7)^8 dx$; $\int e^{-3x+2} dx$; $\int \cos 2x dx$; $\int 2^{-x} dx$; $\int \frac{dx}{6x^2+9}$; $\int \frac{dx}{25x^2-4}$;
 $\int \frac{dx}{\sqrt{49x^2-4}}$; $\int \frac{dx}{\sqrt{4-49x^2}}$.
2. $\int \frac{x^6 dx}{3+x^7}$; $\int \frac{(2x-2)dx}{(x^2-2x+3)^2}$; $\int \frac{e^x dx}{e^{2x}+16}$; $\int \frac{dx}{x \ln^5 x}$;
3. $\int \operatorname{arctg} x dx$; $\int x \sin 4x dx$
4. $\int \frac{(x+2)dx}{x^2-5x+4}$

Individual exercises. Variant 35. Find indefinite integrals

1. $\int 3^{2x} dx$; $\int e^{6-2x} dx$; $\int \sin(5+2x) dx$; $\int \frac{dx}{3x-1}$; $\int \frac{dx}{9x^2+16}$; $\int \frac{dx}{4x^2-81}$;
 $\int \frac{dx}{\sqrt{4x^2-1}}$; $\int \frac{dx}{\sqrt{1-4x^2}}$.
2. $\int \frac{\arcsin^7 x dx}{\sqrt{1-x^2}}$; $\int \frac{(6x+8)dx}{3x^2+8x-5}$; $\int \frac{dx}{x \ln^7 x}$; $\int \frac{e^x dx}{e^{2x}-4}$.
3. $\int x \sin 4x dx$; $\int x^5 \ln x dx$;
4. $\int \frac{(x+3)dx}{x^2-3x+2}$;

Individual exercises. Variant 36. Find indefinite integrals

1. $\int (5x+7)^2 dx$; $\int 3^{-x} dx$; $\int \sqrt{6x-1} dx$; $\int \frac{dx}{7-2x}$; $\int \frac{dx}{4x^2+81}$; $\int \frac{dx}{49x^2-16}$;
 $\int \frac{dx}{\sqrt{16x^2-9}}$; $\int \frac{dx}{\sqrt{9-16x^2}}$.
2. $\int \frac{xdx}{\sqrt{8x^2+5}}$; $\int \frac{e^x dx}{e^{2x}+4}$; $\int \frac{(2x-3)dx}{x^2-3x+5}$; $\int \frac{x^2 dx}{9+x^6}$; $\int x(6x^2+5)^9 dx$
3. $\int x^4 \ln x dx$; $\int x e^{-3x} dx$
4. $\int \frac{(x+1)dx}{x^2-8x+7}$;