

Расчетно-графическая работа N 2.1

Неопределенный интеграл

1. Найти неопределенный интеграл.

1. $\int \frac{x^2 + x}{\sqrt{x}} dx$
2. $\int \frac{dx}{2 + 5x^2}$
3. $\int \left(e^{-2x} + \frac{1}{x} + \frac{2}{x^2} \right) dx$
4. $\int \frac{x^2 + x}{x^2 - 1} dx$
5. $\int \frac{x^4 + 2x^2 + 1}{x^2 + 1} dx$
6. $\int \left(\frac{x^2 - 2x + 1}{x - 1} + \sqrt{x} \right) dx$
7. $\int \frac{x^2 + 1}{x^2 - 1} dx$
8. $\int \frac{x^2 + 4}{x^2 - 4} dx$
9. $\int \frac{x^{3/2} - 8}{x + 2\sqrt{x} + 4} dx$
10. $\int \frac{dx}{\sqrt{5 + 4x^2}}$
11. $\int \frac{dx}{x(x + 2)}$
12. $\int \left(3^{3x} - \frac{x^2 - 4}{5} \right) dx$
13. $\int \frac{dx}{2x^2 - 1}$
14. $\int \frac{dx}{\sqrt{4x^2 + 1}}$
15. $\int \frac{dx}{x^2 - 5x + 1}$
16. $\int \frac{dx}{3 - 2x^2}$
17. $\int \frac{dx}{5 + 4x^2}$
18. $\int \left(\frac{1}{\sqrt{x}} + \frac{1}{\sqrt{2x^2 - 5}} \right) dx$
19. $\int \frac{dx}{3x^2 + 4}$
20. $\int \frac{dx}{4 - 3x^2}$
21. $\int \left(e^{2x} + \frac{3x^2}{x^2 + 16} \right) dx$
22. $\int \frac{dx}{\sqrt{4 - 9x^2}}$
23. $\int \frac{x^2 + 7}{x^2 + 16} dx$
24. $\int e^x \left(1 - \frac{e^{-x}}{x^2} \right) dx$
25. $\int \frac{x^2}{3x^2 - 1} dx$
26. $\int \frac{x + \sqrt{x}}{1 + \sqrt{x}} dx$
27. $\int \frac{x^4 + 3x^2 + 4}{x^2 + 3} dx$
28. $\int \frac{x - \sqrt{x}}{1 - \sqrt{x}} dx$
29. $\int \frac{dx}{\sqrt{1 - 4x^2}}$
30. $\int (2x^{-1} + 3x^{-2} + 4x^{-3}) dx$

2. Найти неопределенный интеграл.

1. $\int \frac{\cos 2x}{\cos x - \sin x} dx$
2. $\int \sin^2 \frac{x}{2} dx$
3. $\int \left(1 - 2 \cos^2 \frac{x}{2} \right) dx$
4. $\int \left(e^{3-x} + \frac{1}{5 + 2x^2} \right) dx$
5. $\int \frac{(x^2 - 1)^2}{x^2 - 2} dx$
6. $\int \frac{dx}{x\sqrt{4x^2 + 1}}$
7. $\int \left(e^{x+1} + \frac{5}{5 + x^2} \right) dx$
8. $\int \frac{dx}{3 + (\sqrt{3}x)^2}$
9. $\int \frac{dx}{x^3 + 5}$
10. $\int \left(2^{1-x} + \frac{3}{3 + x^2} \right) dx$
11. $\int \frac{dx}{x\sqrt{x^2 + 1}}$
12. $\int e^{x+1} \left(1 + \frac{e^{-x}}{x^3} \right) dx$
13. $\int \left(e^{3+x} + \frac{1}{2 + 2x^2} \right) dx$
14. $\int \frac{\cos^2 x - 1}{dx}$
15. $\int \frac{(4-x + x^2)^4}{x^2} dx$
16. $\int (e^{-4x} + 2e^{-3x}) dx$
17. $\int \frac{dx}{\sqrt{4 - x^2}}$
18. $\int \left(\lg^2 \frac{x}{2} + 1 \right) dx$

19. $\int \frac{x^2}{5x^2 + 4} dx$
20. $\int \frac{dx}{\sqrt{2x^2 - 5}}$
21. $\int e^x \left(1 + \frac{e^{-x}}{x^2 - 1} \right) dx$
22. $\int \frac{\sin x + 1}{\cos x} dx$
23. $\int \left(1 + \frac{1}{x^2\sqrt{x}} \right) dx$
24. $\int \left(\frac{1}{1 + x^2} + \frac{1}{x^2 - 1} \right) dx$
25. $\int \left(\frac{1}{x} + 3^x \right) dx$
26. $\int \frac{\cos 2x}{\sin x + \cos x} dx$
27. $\int \left(2^{x+1} + \sqrt{1 - x^2} \right) dx$
28. $\int \frac{dx}{9x^2 + 4}$
29. $\int \frac{dx}{\sqrt{1 - 2x^2}}$
30. $\int \left(\frac{1}{4 + x^2} + \frac{1}{4 - x^2} \right) dx$

3. Найти неопределенный интеграл.

1. $\int \frac{\cos^2 x}{\sin 2x} dx$
2. $\int \frac{\sin^3 x}{\cos^5 x} dx$
3. $\int \left(x^{3/7} + \frac{x}{\sqrt{5 + 2x^2}} \right) dx$
4. $\int \frac{1}{\operatorname{ctg} x} dx$
5. $\int \frac{\cos x dx}{\sqrt{\sin^2 x + 3}}$
6. $\int \left(e^{3x+1} + \frac{5}{5 + x^2} \right) dx$
7. $\int \frac{\sqrt{\operatorname{tg} x + 1}}{\cos^2 x} dx$
8. $\int (2 \sin^2 2x - 1) dx$
9. $\int (5e^{3x/2} + 4x\sqrt{x^2 + 1}) dx$
10. $\int \sin 2x dx$
11. $\int \frac{\cos x}{2 \sin x + 3} dx$
12. $\int \left(7^{2x+1} - x^2 - \frac{3}{x} \right) dx$
13. $\int \frac{1}{\operatorname{tg} 4x} dx$
14. $\int \left(5^{2x} + \frac{2}{5x} \right) dx$
15. $\int (2^{-x/3} + x\sqrt{x}) dx$
16. $\int \frac{e^{2x}}{\sqrt[4]{e^x + 1}} dx$
17. $\int e^{\sin x} \cos x dx$
18. $\int (x^{-3/4} + (4x^2 - 8)^{-1/2}) dx$
19. $\int \frac{x^2}{\sqrt{2 - 3x^3}} dx$
20. $\int \frac{e^x}{e^x + 1} dx$
21. $\int \frac{1}{x\sqrt{1 - \ln^2 x}} dx$
22. $\int \frac{1}{1 + \operatorname{ctg}^2 x} dx$
23. $\int \frac{x - \operatorname{arctg} x}{1 + x^2} dx$
24. $\int \frac{dx}{\cos x + 1}$
25. $\int \frac{1}{\operatorname{ctg} 2x} dx$
26. $\int \frac{x^3}{x^4 + 1} dx$
27. $\int e^{2x} \operatorname{tg}(e^{2x} - 1) dx$
28. $\int \frac{1}{\operatorname{tg} x} dx$
29. $\int \frac{\sin^2 x}{\sin 2x} dx$
30. $\int (2 \sin^2 (2x + 1) - 1) dx$

4. Найти неопределенный интеграл.

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

10. $\int \frac{x dx}{x^4 + 2x^2 + 5}$
11. $\int \frac{\cos 2x dx}{(2 + 3 \sin 2x)^3}$
12. $\int x^3(1 - 2x^4)^3 dx$
13. $\int \sin x \cos x dx$
14. $\int \frac{dx}{x \ln x}$
15. $\int 2x(x^2 + 1)^4 dx$
16. $\int \frac{x dx}{3x^2 - 27}$
17. $\int \frac{x \ln x}{2x dx}$
18. $\int \frac{e^x \sqrt{\operatorname{arctg} e^x}}{1 + e^{2x}} dx$
19. $\int \frac{e^{3x} dx}{2 + e^{2x}}$
20. $\int \frac{\sqrt{5 - x^6}}{x^2 dx}$
21. $\int \frac{e^{\sqrt{x}} dx}{\sqrt{x}}$
22. $\int \frac{dx}{x\sqrt{1 - \ln^2 x}}$
23. $\int \frac{\arccos x - x}{\sqrt{1 - x^2}} dx$
24. $\int x^2 \exp(x^3) dx$
25. $\int \frac{\cos^3 x dx}{\sin^4 x}$
26. $\int \frac{e^x}{(7 - e^x)^2} dx$
27. $\int \frac{\sin x dx}{\sqrt{\cos^2 x + 4}}$
28. $\int \frac{e^x}{e^x + 1} dx$
29. $\int \frac{dx}{x\sqrt{\ln x}}$
30. $\int \sqrt{1 + 3 \cos^2 x} \cdot \sin 2x dx$

5. Найдти неопределенный интеграл.

1. $\int \frac{dx}{e^{3x} + 2}$
2. $\int \frac{dx}{4 - e^{2x}}$
3. $\int \frac{dx}{5 - e^{6x}}$
4. $\int \frac{dx}{e^{2x} + 2}$
5. $\int \frac{e^{2x} dx}{e^{2x} + e^x - 2}$
6. $\int \frac{e^x + 2}{(e^x - 3) dx}$
7. $\int \frac{dx}{(e^x - 1) dx}$
8. $\int \frac{e^{2x} + 1}{(e^{2x} - 1) dx}$
9. $\int \frac{e^{3x} + 2}{(e^{3x} - 2) dx}$
10. $\int \frac{dx}{2e^x - 1}$
11. $\int \frac{dx}{2 - 3e^{2x}}$
12. $\int \frac{dx}{3e^x + 2}$
13. $\int \frac{dx}{(e^x + 1) dx}$
14. $\int \frac{dx}{e^{6x} - 4}$
15. $\int \frac{dx}{e^x - 2}$
16. $\int \frac{e^{3x} + e^{2x} dx}{e^{2x} - 1}$
17. $\int \frac{(e^{3x} + 3e^{2x}) dx}{e^{2x} - 9}$
18. $\int \frac{e^{3x} dx}{2e^x - 1}$
19. $\int \frac{e^{2x} dx}{e^{2x} + 3}$
20. $\int \frac{e^{2x} dx}{e^{2x} + e^x + 5}$
21. $\int \frac{e^{4x} dx}{e^{4x} - e^{2x} + 3}$
22. $\int \frac{dx}{2e^x + 3}$
23. $\int \frac{dx}{e^{-2x}(3e^x - 1)}$
24. $\int \frac{dx}{e^{-2x}(e^x + 2)}$
25. $\int \frac{e^{-2x}(25 - e^{2x})}{e^{3x} - 3} dx$
26. $\int \frac{dx}{e^{3x} - 3}$
27. $\int \frac{dx}{3e^x + 2}$
28. $\int \frac{e^{-3x} dx}{5e^{3x} + e^{3x}}$
29. $\int \frac{dx}{e^{-2x}(3 - e^x)}$
30. $\int \frac{e^{-2x} dx}{4e^{2x} + e^{2x}}$

6. Найдти неопределенный интеграл.

1. $\int \frac{x dx}{x^2 + 3x + 2}$
2. $\int \frac{dx}{x^2 - 6x - 16}$
3. $\int \frac{x}{2 + 3x + x^2} dx$

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4. $\int \frac{x + 1}{8x^2 + 2x - 1} dx$
5. $\int \frac{x + 1}{x^2 - 8x + 15} dx$
6. $\int \frac{x + 4}{x^2 + x - 4} dx$
7. $\int \frac{dx}{x^2 + x + 1}$
8. $\int \frac{x^2 - 4x - 5}{3x - 1} dx$
9. $\int \frac{x^4 + 6x^2 + 5}{2x - 2} dx$
10. $\int \frac{x^2 + 2x + 3}{x + 3} dx$
11. $\int \frac{x^2 + x - 6}{x + 1} dx$
12. $\int \frac{3x^2 - 3x + 2}{x + 1} dx$
13. $\int \frac{2x^2 - x + 1}{x + 3} dx$
14. $\int \frac{4x^2 + 2x + 1}{x + 5} dx$
15. $\int \frac{x^2 - 6x + 5}{x + 1} dx$
16. $\int \frac{4x^2 + 3x + 1}{2x + 2} dx$
17. $\int \frac{2x^2 + 2x + 1}{x - 3} dx$
18. $\int \frac{5x^2 + 2x + 1}{x dx}$
19. $\int \frac{3x^2 - 2x + 1}{3x - 2} dx$
20. $\int \frac{3x^2 + x + 1}{x - 1} dx$
21. $\int \frac{2x^2 + 3x + 2}{2x - 1} dx$
22. $\int \frac{2x^2 - 3x + 4}{3x - 1} dx$
23. $\int \frac{4x^2 - 3x - 1}{x + 1} dx$
24. $\int \frac{2x^2 + x + 2}{x - 1} dx$
25. $\int \frac{4x^2 + 3x + 2}{4x + 8} dx$
26. $\int \frac{5x^2 + 2x + 1}{3x + 1} dx$
27. $\int \frac{2x^2 - 2x + 1}{5x + 3} dx$
28. $\int \frac{3x^2 + 2x + 5}{4x^2 - 2x + 1} dx$
29. $\int \frac{dx}{4x^2 - 2x + 1}$
30. $\int \frac{dx}{x^2 + 10x + 29}$

7. Найдти неопределенный интеграл.

1. $\int \frac{x + 5}{\sqrt{2 - x - x^2}} dx$
2. $\int \frac{4x - 3}{\sqrt{3x^2 + x + 1}} dx$
3. $\int \frac{(4x - 3) dx}{\sqrt{2 + 2x - 3x^2}}$
4. $\int \frac{dx}{\sqrt{-x^2 + 4x + 5}}$
5. $\int \frac{dx}{\sqrt{2x^2 + 2x + 1}}$
6. $\int \frac{dx}{\sqrt{1 - x - 2x^2}}$
7. $\int \frac{dx}{\sqrt{5x^2 + 3x + 2}}$
8. $\int \frac{dx}{\sqrt{5 + 4x + x^2}}$
9. $\int \frac{dx}{\sqrt{5 + 12x - 9x^2}}$
10. $\int \frac{dx}{\sqrt{1 - 3x - 4x^2}}$
11. $\int \frac{dx}{\sqrt{2x^2 - 5x + 3}}$
12. $\int \frac{dx}{\sqrt{x^2 - x + 1}}$
13. $\int \frac{dx}{\sqrt{x^2 + x + 2}}$
14. $\int \frac{dx}{\sqrt{21 + 12x - 9x^2}}$
15. $\int \frac{dx}{\sqrt{1 - x - 3x^2}}$
16. $\int \frac{dx}{\sqrt{4x^2 - 4x + 3}}$
17. $\int \frac{dx}{\sqrt{7 - 6x - x^2}}$
18. $\int \frac{dx}{\sqrt{9x^2 + 6x - 2}}$
19. $\int \frac{dx}{\sqrt{-2x^2 + 3x + 2}}$
20. $\int \frac{dx}{\sqrt{9x^2 - 12x + 5}}$
21. $\int \frac{dx}{\sqrt{1 - x - 3x^2}}$
22. $\int \frac{dx}{\sqrt{x^2 - x + 1}}$
23. $\int \frac{dx}{\sqrt{x^2 + 7x + 13}}$
24. $\int \frac{dx}{\sqrt{7 + 6x - 2x^2}}$
25. $\int \frac{dx}{\sqrt{3 - 4x - 4x^2}}$
26. $\int \frac{dx}{\sqrt{2x^2 - x + 2}}$
27. $\int \frac{dx}{\sqrt{3x^2 + 3x + 2}}$
28. $\int \frac{dx}{\sqrt{4x^2 - 3x + 2}}$
29. $\int \frac{dx}{\sqrt{2x^2 + 3x + 4}}$
30. $\int \frac{dx}{\sqrt{2x^2 - 3x + 5}}$

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8. Найдите неопределенный интеграл.

1. $\int x \cos x dx$
2. $\int x \cos 2x dx$
3. $\int x \cos 3x dx$
4. $\int x \cos 4x dx$
5. $\int x \cos \frac{x}{2} dx$
6. $\int x \cos \frac{x}{3} dx$
7. $\int x \sin x dx$
8. $\int x \sin 2x dx$
9. $\int x \sin 3x dx$
10. $\int x \sin 4x dx$
11. $\int x \sin \frac{x}{2} dx$
12. $\int x \sin \frac{x}{3} dx$
13. $\int x e^x dx$
14. $\int x e^{2x} dx$
15. $\int x e^{3x} dx$
16. $\int x e^{4x} dx$
17. $\int x e^{x/2} dx$
18. $\int x e^{x/3} dx$
19. $\int x e^{-x} dx$
20. $\int x e^{-2x} dx$
21. $\int x e^{-3x} dx$
22. $\int x e^{-4x} dx$
23. $\int x e^{-x/2} dx$
24. $\int x e^{-x/3} dx$
25. $\int x 3^{-x} dx$
26. $\int x 3^{2x} dx$
27. $\int x 2^{3x} dx$
28. $\int x 2^{-x} dx$
29. $\int x 2^{2x} dx$
30. $\int x 4^{-x} dx$

9. Найдите неопределенный интеграл.

1. $\int x^3 \cos x dx$
2. $\int x^2 \cos 2x dx$
3. $\int x^2 \cos 3x dx$
4. $\int x^2 \cos 4x dx$
5. $\int x^2 \cos \frac{x}{2} dx$
6. $\int x^2 \cos \frac{x}{3} dx$
7. $\int x^3 \sin x dx$
8. $\int x^2 \sin 2x dx$
9. $\int x^2 \sin 3x dx$
10. $\int x^2 \sin 4x dx$
11. $\int x^2 \sin \frac{x}{2} dx$
12. $\int x^2 \sin \frac{x}{3} dx$
13. $\int x^3 e^x dx$
14. $\int x^2 e^{2x} dx$
15. $\int x^2 e^{3x} dx$
16. $\int x^2 e^{4x} dx$
17. $\int x^2 e^{x/2} dx$
18. $\int x^2 e^{x/3} dx$
19. $\int x^3 e^{-x} dx$
20. $\int x^2 e^{-2x} dx$
21. $\int x^2 e^{-3x} dx$
22. $\int x^2 e^{-4x} dx$
23. $\int x^2 e^{-x/2} dx$
24. $\int x^2 e^{-x/3} dx$
25. $\int x^2 3^{-x} dx$
26. $\int x^2 3^{2x} dx$
27. $\int x^2 2^{3x} dx$
28. $\int x^2 2^{-x} dx$
29. $\int x^2 2^{2x} dx$
30. $\int x^2 4^{-x} dx$

10. Найдите неопределенный интеграл.

1. $\int e^{4x} \sin 4x dx$
2. $\int e^{3x} \sin 3x dx$
3. $\int e^x \cos 9x dx$

4. $\int e^x \cos 8x dx$
5. $\int e^x \cos 7x dx$
6. $\int e^{2x} \sin 3x dx$
7. $\int e^{2x} \cos 4x dx$
8. $\int e^{2x} \cos 2x dx$
9. $\int e^{3x} \sin 2x dx$
10. $\int e^{2x} \sin 2x dx$
11. $\int e^{2x} \sin x dx$
12. $\int e^x \sin x dx$
13. $\int e^{3x} \sin 4x dx$
14. $\int e^{-3x} \cos 2x dx$
15. $\int e^{2x} \cos 3x dx$
16. $\int e^x \cos 8x dx$
17. $\int e^{-x} \cos x dx$
18. $\int e^x \cos 5x dx$
19. $\int e^{-x} \sin 2x dx$
20. $\int e^{-2x} \cos x dx$
21. $\int e^{-2x} \sin x dx$
22. $\int e^{-3x} \sin x dx$
23. $\int e^{-3x} \cos x dx$
24. $\int e^x \cos 3x dx$
25. $\int e^x \sin 3x dx$
26. $\int e^{x/2} \sin x dx$
27. $\int e^{x/2} \cos x dx$
28. $\int e^{x/2} \sin 2x dx$
29. $\int e^{-x} \cos 2x dx$
30. $\int e^{x/2} \cos 5x dx$

11. Найдите неопределенный интеграл.

1. $\int x \ln(x-1) dx$
2. $\int \arcsin x/5 dx$
3. $\int x^3 \ln x dx$
4. $\int \operatorname{arctg} 3x dx$
5. $\int \operatorname{arctg} x dx$
6. $\int \operatorname{arctg} 2x dx$
7. $\int (1 - \ln x)^2 dx$
8. $\int \arccos \frac{x}{2} dx$
9. $\int \arcsin 5x dx$
10. $\int \ln^2 x dx$
11. $\int x \ln^2 x dx$
12. $\int \frac{\ln x}{x^6} dx$
13. $\int \frac{\ln x}{x^5} dx$
14. $\int \arccos \frac{x}{3} dx$
15. $\int \ln(1-x) dx$
16. $\int \frac{\ln(1+x)}{x^2} dx$
17. $\int (3 + \ln x)^2 dx$
18. $\int \frac{\ln x}{(x+1)^2} dx$
19. $\int \frac{\ln x}{x^4} dx$
20. $\int \frac{\ln x}{x^3} dx$
21. $\int x^6 \ln x dx$
22. $\int \arccos \frac{x}{4} dx$
23. $\int \arccos x dx$
24. $\int x \arccos \frac{x}{2} dx$
25. $\int x \arccos x dx$
26. $\int \frac{\arcsin \sqrt{x}}{\sqrt{x}} dx$
27. $\int x \arcsin x dx$
28. $\int \arcsin \frac{x}{4} dx$
29. $\int \operatorname{arctg} \frac{x}{5} dx$
30. $\int \arcsin \frac{x}{7} dx$

12. Найдите неопределенный интеграл.

1. $\int x \sin^2 3x dx$
2. $\int \frac{x dx}{\sin^2 2x}$
3. $\int \frac{x dx}{\cos^2 5x}$

4. $\int \frac{x dx}{\cos^2 7x}$
5. $\int x \sin^2 x dx$
6. $\int e^x \cdot \ln(e^x + 1) dx$
7. $\int \frac{x dx}{\cos^2 3x}$
8. $\int \frac{x dx}{\cos^2 x}$
9. $\int \frac{x dx}{\sin^2 x}$
10. $\int x \cos^2 x dx$
11. $\int x \cos^2 5x dx$
12. $\int e^x \cdot \ln(e^x - 1) dx$
13. $\int \frac{\arctg x}{\sqrt{1+x^2}} dx$
14. $\int x \cos^2 2x dx$
15. $\int x \cos^2 3x dx$
16. $\int x \cos^2 4x dx$
17. $\int \frac{x dx}{\sin^2 4x}$
18. $\int x \cos^2 x/2 dx$
19. $\int \frac{x dx}{\sin^2 3x}$
20. $\int x \sin^2 2x dx$
21. $\int \frac{x dx}{\sin^2 7x}$
22. $\int x \sin^2 4x dx$
23. $\int x \sin^2 5x dx$
24. $\int e^x \cdot \ln(e^x + 8) dx$
25. $\int \frac{x \cos x}{\sin^3 x} dx$
26. $\int \frac{x dx}{\cos^2 6x}$
27. $\int \frac{\ln(\lg x)}{\cos^2 x} dx$
28. $\int \frac{x dx}{\cos^2 4x}$
29. $\int x \sin^2 x/2 dx$
30. $\int e^x \cdot \ln(2e^x - 1) dx$

13. Найти неопределенный интеграл.

1. $\int \frac{x^3 - 2x^2 - 3}{x^2 + 4x - 5} dx.$
2. $\int \frac{2x^3 - 5x}{x^2 + x - 2} dx.$
3. $\int \frac{x^4 + 2x^2 - 3}{x^3 + 5x^2 - 3} dx.$
4. $\int \frac{x^2 - 5x + 6}{x^4 - x^2 + 1} dx.$
5. $\int \frac{x^2 - 4x + 3}{x^3 + 5x^2 - 4x} dx.$
6. $\int \frac{x^2 + 3x - 4}{x^4 + 2x^2 - 3} dx.$
7. $\int \frac{x^2 + 3x + 2}{3x^3 + 2x - 3} dx.$
8. $\int \frac{x^2 - 2x - 3}{x^4 - x^3 + 1} dx.$
9. $\int \frac{x^2 - 2x - 3}{x^3 - 5x^2 + x - 7} dx.$
10. $\int \frac{x^2 - 3x - 10}{2x^3 - 2x^2 - x - 4} dx.$
11. $\int \frac{x^2 + 3x + 2}{x^3 - 5x^2 + x - 7} dx.$
12. $\int \frac{x^2 - 3x + 2}{x^4 + 2x^3 - x^2 - 3} dx.$
13. $\int \frac{x^2 + 5x + 6}{x^4 - 2x^2 - 3} dx.$
14. $\int \frac{x^2 - x - 12}{x^3 + 3x^2 - 5} dx.$
15. $\int \frac{x^2 + 6x + 5}{x^3 + 2x^2 - 3x - 1} dx.$
16. $\int \frac{x^2 + 5x - 6}{x^3 - 3x + 1} dx.$
17. $\int \frac{x^2 - 5x + 4}{2x^3 - 2x^2 + x - 3} dx.$
18. $\int \frac{x^2 - 5x + 4}{x^4 - x^3 - 4x + 1} dx.$
19. $\int \frac{x^2 - x - 12}{2x^3 + x^2 - x - 6} dx.$
20. $\int \frac{x^2 - 7x + 6}{x^4 + 2x^2 + x - 5} dx.$
21. $\int \frac{x^2 - 7x + 6}{x^4 + 2x^2 + x - 5} dx.$
22. $\int \frac{x^2 - x - 2}{x^2 + 2x - 3} dx.$
23. $\int \frac{x^4 - 2x^2 - 4}{x^2 + 3x - 4} dx.$
24. $\int \frac{x^4 - 2x^2 - 4}{x^2 + 3x - 4} dx.$

25. $\int \frac{x^4 + 3x^3 - 2x - 1}{x^2 - 3x - 4} dx.$
26. $\int \frac{3x^3 + 3x^2 + x - 1}{x^2 + x - 6} dx.$
27. $\int \frac{x^2 + 3x - 5}{x^3 + 3x^2 - 5x - 1} dx.$
28. $\int \frac{x^2 - 5x + 6}{x^4 - 5x^2 - 3x + 1} dx.$
29. $\int \frac{x^4 + 4x^3 - 2x}{x^2 - x - 2} dx.$
30. $\int \frac{x^2 - 2x - 8}{x^2 - 2x - 8} dx.$

14. Найти неопределенный интеграл.

1. $\int \frac{2x + 3}{x^3 + x^2 - 2x} dx$
2. $\int \frac{x}{(x+1)(x+2)(x+3)} dx$
3. $\int \frac{dx}{(x-2)(x+5)}$
4. $\int \frac{dx}{(x-1)^2(x-2)}$
5. $\int \frac{dx}{(x+1)(x-2)(x-3)}$
6. $\int \frac{x}{(x+1)(x^2-8x-7)} dx$
7. $\int \frac{dx}{x^3+1}$
8. $\int \frac{dx}{(x+3)^2(x-5)}$
9. $\int \frac{dx}{x^3-2x^2+x-1}$
10. $\int \frac{dx}{x(x-1)^2}$
11. $\int \frac{1}{(x+1)(x^2-7x+8)} dx$
12. $\int \frac{dx}{(x+1)(x+2)(x-3)}$
13. $\int \frac{dx}{x(x+1)^3}$
14. $\int \frac{dx}{15x^2-4x-81}$
15. $\int \frac{dx}{5x^3-17x^2+18x-5}$
16. $\int \frac{dx}{(x-1)^3(x-2)}$
17. $\int \frac{dx}{(x+1)^2(x-1)}$
18. $\int \frac{x}{(x-1)(x^2-x-1)}$
19. $\int \frac{dx}{x^3+2}$
20. $\int \frac{dx}{(x^2+2x+1)(x-1)^2}$
21. $\int \frac{dx}{x^3+2x^2+x}$
22. $\int \frac{dx}{x^3-4x}$
23. $\int \frac{dx}{x^3-5x^2+6x}$
24. $\int \frac{dx}{(x-2)(x-1)(x-4)}$
25. $\int \frac{dx}{(x^2-1)^2}$
26. $\int \frac{dx}{x^2+4x+4}$
27. $\int \frac{dx}{x(x-1)^2}$
28. $\int \frac{dx}{6x^2-13x+4}$
29. $\int \frac{dx}{x^3-3x^2+2x}$
30. $\int \frac{dx}{(x-1)^3(x+3)}$

15. Найти неопределенный интеграл.

1. $\int \frac{2x^3 + x}{x^4 - 16} dx$.
2. $\int \frac{1}{x(x^2 + 2)} dx$.
3. $\int \frac{7x + 13}{(x + 3)(x^2 + 2x + 3)} dx$.
4. $\int \frac{1}{x^3 + 1} dx$.
5. $\int \frac{1}{x^3 - 5x^2 + 6x} dx$.
6. $\int \frac{1}{(x + 1)(x^2 + 2)} dx$.
7. $\int \frac{6x - 4}{x^3 + 4x} dx$.
8. $\int \frac{1}{(x + 2)(x^2 + 1)} dx$.
9. $\int \frac{x^3 + 2x^2 + 3x}{x^3 - 3x^2 - 1} dx$.
10. $\int \frac{1 - x^4}{x^2} dx$.
11. $\int \frac{x + 1}{x(x^2 + 3)} dx$.
12. $\int \frac{1}{x^3 + 2x^2 + x + 3} dx$.
13. $\int \frac{3x + 1}{x^3 + x} dx$.
14. $\int \frac{1}{x^3 - x + 5} dx$.
15. $\int \frac{(x + 2)(x^2 + x + 1)}{x^2 - 3x - 1} dx$.
16. $\int \frac{3x - 2}{x^3 + 1} dx$.
17. $\int \frac{x^2 - 2}{x^4 - 16} dx$.
18. $\int \frac{x - 3}{x^4 + 5x^2 + 4} dx$.
19. $\int \frac{3x - 6}{x^4 - 1} dx$.
20. $\int \frac{1}{x^4 + 5x^2 + 4} dx$.
21. $\int \frac{x - 3}{x^4 + 5x^2 + 4} dx$.
22. $\int \frac{1}{x^3 + 8} dx$.
23. $\int \frac{1}{(x - 1)(x^2 + 3)} dx$.
24. $\int \frac{5x^2 - x}{(x + 1)(x^2 + 2x + 5)} dx$.
25. $\int \frac{x^2 - 6}{x^3 - 1} dx$.
26. $\int \frac{7x - 3}{x^3 + 3x^2 + 3x} dx$.
27. $\int \frac{1}{(x + 3)(x^2 - x + 1)} dx$.
28. $\int \frac{1}{x^4 - 1} dx$.
29. $\int \frac{1}{x(x^2 + 4)} dx$.
30. $\int \frac{1}{(x + 1)(2x^2 + x + 2)} dx$.

16. Найти неопределенный интеграл.

1. $\int \cos 6x \cdot \cos x dx$.
2. $\int \sin 5x \cdot \sin 6x dx$.
3. $\int \cos 3x \cdot \cos x dx$.
4. $\int \sin 2x \cdot \sin 3x dx$.
5. $\int \cos 4x \cdot \cos x dx$.
6. $\int \sin 8x \cdot \cos 3x dx$.
7. $\int \cos 7x \cdot \cos x dx$.
8. $\int \sin 3x \cdot \cos x dx$.
9. $\int \sin 5x \cdot \cos 3x dx$.
10. $\int \sin 4x \cdot \cos x dx$.
11. $\int \cos 5x \cdot \cos x dx$.
12. $\int \cos 5x \cdot \sin 7x dx$.
13. $\int \sin 7x \cdot \cos 2x dx$.
14. $\int \sin 10x \cdot \sin 3x dx$.
15. $\int \sin 5x \cdot \sin x dx$.
16. $\int \sin 4x \cdot \sin x dx$.
17. $\int \sin 3x \cdot \sin x dx$.
18. $\int \sin 2x \cdot \sin 5x dx$.
19. $\int \sin 2x \cdot \sin x dx$.
20. $\int \sin 6x \cdot \sin 3x dx$.
21. $\int \sin 6x \cdot \cos 7x dx$.
22. $\int \sin 6x \cdot \sin x dx$.
23. $\int \sin 6x \cdot \sin 2x dx$.
24. $\int \sin 8x \cdot \sin 3x dx$.
25. $\int \cos 5x \cdot \cos x dx$.
26. $\int \sin x \cdot \cos(x/2) dx$.
27. $\int \cos 8x \cdot \cos x dx$.

$$28. \int \sin x \cdot \sin(x/2) dx \quad 29. \int \sin 5x \cdot \sin \frac{x}{2} dx \quad 30. \int \sin(x/2) \cdot \sin 3x dx$$

17. Найти неопределенный интеграл.

1. $\int \cos^3 x dx$.
2. $\int \cos^3 4x dx$.
3. $\int \cos(x/2) \cdot \sin^3(x/2) dx$.
4. $\int \cos^3 5x dx$.
5. $\int \sin^2 2x \cdot \cos x dx$.
6. $\int \cos^2(x/2) \cdot \sin(x/2) dx$.
7. $\int \frac{\sin^3 x}{\cos^4 x} dx$.
8. $\int \frac{\cos^3 3x}{\sin 3x} dx$.
9. $\int \cos^3(x/2) \cdot \sin^2(x/2) dx$.
10. $\int \frac{\sin^3 2x}{\cos^3 2x} dx$.
11. $\int \cos^2 x \cdot \sin^5 x dx$.
12. $\int \sin^3 x \cdot \cos^2 x dx$.
13. $\int \sin^3 x dx$.
14. $\int \sin^3 x \cdot \cos^2 x dx$.
15. $\int \sin^2 x \cdot \cos^3 x dx$.
16. $\int \frac{\cos^3 x}{\sin x} dx$.
17. $\int \sin^3 4x dx$.
18. $\int \sin^3 x \cdot \cos^5 x dx$.
19. $\int \frac{\cos^3 2x}{\sin 2x} dx$.
20. $\int \sin^4 x \cdot \cos^3 x dx$.
21. $\int \sin^2 x \cdot \cos^5 x dx$.
22. $\int \sin^3 2x dx$.
23. $\int \frac{\sin^3 3x}{\cos 3x} dx$.
24. $\int \sin^7 x \cdot \cos^6 x dx$.
25. $\int \cos^3 2x dx$.
26. $\int \cos^3 x \cdot \sin x dx$.
27. $\int \cos^3(x/2) \cdot \sin(x/2) dx$.
28. $\int \frac{\cos^3 2x}{\sin^2 2x} dx$.
29. $\int \sin^3 x \cdot \cos^3 x dx$.
30. $\int \cos^4(x/3) \cdot \sin(x/3) dx$.

18. Найти неопределенный интеграл.

1. $\int \sin^4 5x dx$.
2. $\int \cos^4 6x dx$.
3. $\int \sin^4 x dx$.
4. $\int \sin^4 4x dx$.
5. $\int \cos^4 \frac{x}{2} dx$.
6. $\int \sin^6 x dx$.
7. $\int \sin^6 4x dx$.
8. $\int \sin^6 \frac{x}{2} dx$.
9. $\int \cos^2 2x dx$.
10. $\int \cos^6 x dx$.
11. $\int \cos^6 \frac{x}{2} dx$.
12. $\int \cos^4 5x dx$.
13. $\int \cos^6 4x dx$.
14. $\int \cos^4 4x dx$.
15. $\int \cos^4 3x dx$.
16. $\int \sin^4 x \cos^2 x dx$.
17. $\int \sin^4 x \cos^4 x dx$.
18. $\int \sin^4 \frac{x}{2} \cos^2 \frac{x}{2} dx$.
19. $\int \sin^4 2x \cos^2 2x dx$.
20. $\int \sin^2 2x \cos^4 2x dx$.
21. $\int \sin^2 \frac{x}{2} \cos^4 \frac{x}{2} dx$.
22. $\int \sin^2 x \cos^2 x dx$.
23. $\int \sin^2 \frac{x}{2} \cos^2 \frac{x}{2} dx$.
24. $\int \sin^4 \frac{x}{2} \cos^4 \frac{x}{2} dx$.

25. $\int \sin^4 3x \cos^4 3x dx$, 26. $\int \sin^4 4x \cos^2 4x dx$, 27. $\int \sin^4 3x \cos^2 3x dx$,
28. $\int \sin^2 x \cos^4 x dx$, 29. $\int \sin^4 2x \cos^4 2x dx$, 30. $\int \sin^2 3x \cos^4 3x dx$.

19. Найти неопределенный интеграл.

1. $\int \frac{(1 + \operatorname{tg} x) dx}{1 - \operatorname{tg} x}$, 2. $\int \frac{(2 + \operatorname{ctg} x) dx}{3 \operatorname{ctg} x - 1}$, 3. $\int \frac{dx}{4 \operatorname{ctg} x + \operatorname{tg} x}$,
4. $\int \frac{1 + \operatorname{ctg}^2 x}{1 - \operatorname{ctg} x} dx$, 5. $\int \operatorname{tg}^6 x dx$, 6. $\int \frac{dx}{1 - \operatorname{tg} 2x}$,
7. $\int \frac{\operatorname{tg} x dx}{\operatorname{tg} x + 2}$, 8. $\int \frac{(1 + \operatorname{ctg}^2 x) dx}{\operatorname{ctg} x (\operatorname{ctg}^2 x - 1)}$, 9. $\int \operatorname{tg}^7 x dx$,
10. $\int \frac{dx}{\operatorname{tg} x - 1}$, 11. $\int \frac{dx}{2 \operatorname{tg} x + 3}$, 12. $\int \frac{(1 + \operatorname{tg}^2 x) dx}{(\operatorname{tg} x - 2)^3}$,
13. $\int \frac{(4 + \operatorname{tg} 2x) dx}{4 - \operatorname{tg} 2x}$, 14. $\int \operatorname{ctg}^6 x dx$, 15. $\int \frac{dx}{3 \operatorname{ctg} x + 5}$,
16. $\int \frac{dx}{\operatorname{ctg} x - 2}$, 17. $\int \operatorname{tg}^6 x dx$, 18. $\int \operatorname{tg}^2 2x dx$,
19. $\int \operatorname{ctg}^3 2x dx$, 20. $\int \operatorname{ctg}^5 4x dx$, 21. $\int \operatorname{ctg}^5 3x dx$,
22. $\int \operatorname{tg}^5 3x dx$, 23. $\int \operatorname{tg}^4 2x dx$, 24. $\int \operatorname{tg}^5 2x dx$,
25. $\int \operatorname{tg}^5 x dx$, 26. $\int \operatorname{tg}^2 x dx$, 27. $\int \operatorname{ctg}^2 3x dx$,
28. $\int \operatorname{ctg}^3 x dx$, 29. $\int \operatorname{ctg}^3 3x dx$, 30. $\int \operatorname{ctg}^3 4x dx$.

20. Найти неопределенный интеграл.

1. $\int \frac{dx}{1 + \cos x}$, 2. $\int \frac{dx}{3 - 2 \sin x + \cos x}$, 3. $\int \frac{dx}{5 + \cos 2x}$,
4. $\int \frac{dx}{2 + \cos 4x}$, 5. $\int \frac{dx}{2 + \sin x + 2 \cos x}$, 6. $\int \frac{dx}{2 + \cos 3x}$,
7. $\int \frac{dx}{1 + \cos x}$, 8. $\int \frac{dx}{2 + 2 \sin x + \cos x}$, 9. $\int \frac{dx}{5 - \cos 2x}$,
10. $\int \frac{4 + \cos 2x}{dx}$, 11. $\int \frac{3 + 2 \sin x + 2 \cos x}{dx}$, 12. $\int \frac{dx}{7 + \cos x}$,
13. $\int \frac{5 + \cos 2x}{dx}$, 14. $\int \frac{2 + 2 \sin x + 2 \cos x}{dx}$, 15. $\int \frac{2 + \cos 3x}{dx}$,
16. $\int \frac{3 + \cos 4x}{dx}$, 17. $\int \frac{2 - \cos x}{dx}$, 18. $\int \frac{3 - \cos 2x}{dx}$,
19. $\int \frac{dx}{3 + \cos 3x}$, 20. $\int \frac{dx}{3 + \cos x}$, 21. $\int \frac{dx}{2 + \cos 2x}$.

22. $\int \frac{dx}{2 + \cos x}$, 23. $\int \frac{dx}{1 + \sin 4x}$, 24. $\int \frac{dx}{6 + \cos x}$,
25. $\int \frac{dx}{6 - \cos x}$, 26. $\int \frac{dx}{1 + \sin 3x}$, 27. $\int \frac{dx}{3 + \sin 3x}$,
28. $\int \frac{dx}{3 + \sin 2x}$, 29. $\int \frac{dx}{2 + \sin x}$, 30. $\int \frac{dx}{5 + \cos 4x}$.

21. Найти неопределенный интеграл.

1. $\int \frac{dx}{\sin^3 x}$, 2. $\int \frac{dx}{\sin^3 \frac{x}{2}}$, 3. $\int \frac{dx}{\sin^3 2x}$,
4. $\int \frac{dx}{\cos^3 x}$, 5. $\int \frac{dx}{\cos^3 \frac{x}{2}}$, 6. $\int \frac{dx}{\cos^3 2x}$,
7. $\int \frac{dx}{\sin^4 x}$, 8. $\int \frac{dx}{\sin^4 \frac{x}{2}}$, 9. $\int \frac{dx}{\sin^4 5x}$,
10. $\int \frac{dx}{\sin^4 \frac{x}{2}}$, 11. $\int \frac{dx}{\cos^4 x}$, 12. $\int \frac{dx}{\cos^4 \frac{x}{3}}$,
13. $\int \frac{dx}{\cos^4 2x}$, 14. $\int \frac{dx}{\cos^4 4x}$, 15. $\int \frac{dx}{\cos^4 6x}$,
16. $\int \frac{dx}{\sin^5 x}$, 17. $\int \frac{dx}{\sin^5 2x}$, 18. $\int \frac{dx}{\sin^5 4x}$,
19. $\int \frac{dx}{\sin^5 \frac{x}{2}}$, 20. $\int \frac{dx}{\cos^5 x}$, 21. $\int \frac{dx}{\cos^5 3x}$,
22. $\int \frac{dx}{\cos^5 5x}$, 23. $\int \frac{dx}{\cos^5 \frac{x}{3}}$, 24. $\int \frac{dx}{\sin^4 x dx}$,
25. $\int \frac{\cos^4 x dx}{\sin^2 x}$, 26. $\int \frac{\sin^4 2x dx}{\cos^2 2x}$, 27. $\int \frac{\cos^2 2x}{\sin^2 2x}$,
28. $\int \frac{\cos^4 \frac{x}{2} dx}{\sin^2 \frac{x}{2}}$, 29. $\int \frac{\sin^4 \frac{x}{2} dx}{\cos^2 \frac{x}{2}}$, 30. $\int \frac{\sin^4 3x dx}{\cos^2 3x}$.

22. Найти неопределенный интеграл.

1. $\int \frac{x^3}{\sqrt{x+1}} dx$, 2. $\int x^3 \sqrt{x^2+1} dx$, 3. $\int \frac{\sqrt{x} dx}{1+4x}$,
4. $\int \frac{x^2 dx}{\sqrt{(1+x)^3}}$, 5. $\int \frac{dx}{x+\sqrt{x}}$, 6. $\int \sqrt{\frac{3+x}{2-x}} dx$,
7. $\int \frac{dx}{\sqrt{x(4+\sqrt{x})}}$, 8. $\int \frac{\sqrt{x-1}}{x} dx$, 9. $\int \frac{dx}{\sqrt{(1+x)(1+2x)}}$,
10. $\int \sqrt{\frac{x+1}{1-x}} dx$, 11. $\int \frac{dx}{\sqrt{x+1}(x+2)}$, 12. $\int \sqrt{\frac{x-1}{x+1}} \frac{dx}{x}$,
13. $\int \sqrt{\frac{2+x}{2-x}} dx$, 14. $\int \frac{dx}{1+\sqrt{x}}$, 15. $\int \frac{dx}{\sqrt{x}(1-x)}$.

16. $\int \frac{\sqrt{x} dx}{x(1+\sqrt[3]{x})}$ 17. $\int \frac{\sqrt{2-3x}}{2+3x} dx$ 18. $\int \frac{\sqrt{x} dx}{1+x}$
19. $\int \frac{dx}{\sqrt{x}(1+\sqrt[3]{x})}$ 20. $\int \frac{\sqrt{x}}{1-x} dx$ 21. $\int \frac{x\sqrt{x} dx}{1+x}$
22. $\int \frac{x\sqrt{x} dx}{1-x}$ 23. $\int \frac{dx}{x\sqrt{x+1}}$ 24. $\int \frac{dx}{x\sqrt{4+x}}$
25. $\int \frac{dx}{x\sqrt{4x-1}}$ 26. $\int \frac{dx}{(\sqrt{x+1})^2-1}$ 27. $\int \frac{dx}{x\sqrt{1+x}}$
28. $\int \frac{dx}{\sqrt{x}(1+4x)}$ 29. $\int \frac{dx}{\sqrt{x}(5-4x)}$ 30. $\int \frac{dx}{\sqrt{x}(1+x)^2}$
- 23. Найти неопределенный интеграл.**
1. $\int \frac{x^2 dx}{\sqrt{5+4x^2}}$ 2. $\int x^2\sqrt{4x^2+1} dx$ 3. $\int \frac{x^3 dx}{\sqrt{3(x^2+1)^5}}$
4. $\int \frac{dx}{x\sqrt{3x^2+x^4}}$ 5. $\int \frac{dx}{\sqrt{x^4+4x^6}}$ 6. $\int \frac{dx}{x^4+2x^2} dx$
7. $\int \frac{dx}{4x^3+x}$ 8. $\int \frac{dx}{\sqrt{3x^4+2x^6}}$ 9. $\int \frac{dx}{\sqrt{(4+x^2)^3}}$
10. $\int \frac{x^2+2}{\sqrt{x^2+1}} dx$ 11. $\int \sqrt{3+4x^2} dx$ 12. $\int \frac{dx}{(9+x^2)\sqrt{9+x^2}}$
13. $\int \frac{\sqrt{3+x^2}}{x^4+3x^2} dx$ 14. $\int \frac{x^3 dx}{\sqrt{(1+x^2)^5}}$ 15. $\int \frac{dx}{(x^2+4)\sqrt{x^2+4}}$
16. $\int \frac{\sqrt{x^2+4} dx}{x^2+1}$ 17. $\int \frac{x^2+1}{\sqrt{7+x^2}} dx$ 18. $\int \frac{\sqrt{3(x^2+1)}}{x^2} dx$
19. $\int \frac{2x^2+3x}{\sqrt{x^2+2}} dx$ 20. $\int \frac{dx}{\sqrt{(x^2+3)^3}}$ 21. $\int \frac{\sqrt{4x^2+9}}{4x^3+9x} dx$
22. $\int \frac{x}{\sqrt{(x^2+1)^3}} dx$ 23. $\int \sqrt{6x^2+7} dx$ 24. $\int \frac{dx}{\sqrt{6x^4+9x^6}}$
25. $\int \frac{2x^2+1}{\sqrt{x^2+1}} dx$ 26. $\int \frac{dx}{x^3\sqrt{x^2+1}}$ 27. $\int \frac{x^2 dx}{\sqrt{(1+4x^2)^3}}$
28. $\int \frac{2x^2}{\sqrt{(1+x^2)^3}} dx$ 29. $\int \frac{\sqrt{4+x^2}}{x^2} dx$ 30. $\int \frac{\sqrt{9+4x^2}}{x} dx$
- 24. Найти неопределенный интеграл.**
1. $\int \frac{dx}{x\sqrt{16-x^2}}$ 2. $\int \frac{dx}{x^2\sqrt{5-x^2}}$ 3. $\int \frac{dx}{x^2\sqrt{5-4x^2}}$

4. $\int \frac{x^4 dx}{\sqrt{(1-x^2)^3}}$ 5. $\int \sqrt{4-x^2} dx$ 6. $\int \sqrt{9-4x^2} dx$
7. $\int \frac{x^2 dx}{\sqrt{(1-x^2)^3}}$ 8. $\int \frac{dx}{x^3\sqrt{(1-x^2)^3}}$ 9. $\int \sqrt{(1-x^2)^3} dx$
10. $\int \frac{dx}{x^2\sqrt{1-x^2}}$ 11. $\int \frac{dx}{x^2\sqrt{4-x^2}}$ 12. $\int \frac{x^2 dx}{\sqrt{1-x^2}}$
13. $\int \sqrt{4-5x^2} dx$ 14. $\int \frac{dx}{x\sqrt{9-x^2}}$ 15. $\int \frac{(9-x^2)\sqrt{(9-x^2)^3}}{x^2} dx$
16. $\int \frac{\sqrt{4-x^2}}{x} dx$ 17. $\int x^2\sqrt{1-x^2} dx$ 18. $\int \frac{\sqrt{4-x^2}}{x^2} dx$
19. $\int \frac{\sqrt{5-4x^2}}{x} dx$ 20. $\int \frac{x^2\sqrt{4-3x^2}}{4-3x^2} dx$ 21. $\int \frac{dx}{x\sqrt{4-x^2}}$
22. $\int \frac{dx}{x\sqrt{9-16x^2}}$ 23. $\int \frac{dx}{x\sqrt{4-3x^2}}$ 24. $\int \frac{dx}{x^2\sqrt{4-x^2}}$
25. $\int \frac{dx}{\sqrt{1-x^2}}$ 26. $\int \frac{x^2\sqrt{2-x^2}}{2-x^2} dx$ 27. $\int \frac{(4-x^2)\sqrt{4-x^2}}{x^3} dx$
28. $\int \frac{(4-x^2)^2}{\sqrt{4-x^2}} dx$ 29. $\int \frac{5x^2+1}{\sqrt{(1-4x^2)^3}} dx$ 30. $\int \frac{dx}{\sqrt{4-x^2}}$
- 25. Найти неопределенный интеграл.**

1. $\int \sqrt{6x^2-7} dx$ 2. $\int \frac{x^2}{\sqrt{9x^2-1}} dx$ 3. $\int \sqrt{x^2-3} dx$
4. $\int \sqrt{x^2-25} dx$ 5. $\int \sqrt{25x^2-16} dx$ 6. $\int \frac{x dx}{(5x^2-1)^2\sqrt{5x^2-1}}$
7. $\int \frac{x^2 dx}{\sqrt{(x^2-1)^3}}$ 8. $\int \sqrt{x^2-4} dx$ 9. $\int \frac{dx}{\sqrt{x^2-1}}$
10. $\int \sqrt{4x^2-9} dx$ 11. $\int \frac{dx}{x\sqrt{x^2-16}}$ 12. $\int \frac{dx}{\sqrt{(x^2-1)^3}}$
13. $\int \frac{dx}{x^2\sqrt{x^2-4}}$ 14. $\int \frac{x^2 dx}{\sqrt{(2x^2-1)^3}}$ 15. $\int \frac{dx}{x\sqrt{4x^2-1}}$
16. $\int \frac{dx}{x\sqrt{9x^2-4}}$ 17. $\int \frac{dx}{x\sqrt{5x^2-4}}$ 18. $\int \frac{\sqrt{a^2x^4-x^2}}{x} dx$
19. $\int \frac{x\sqrt{x^2-9}}{x^2-9} dx$ 20. $\int \sqrt{x^2-64} dx$ 21. $\int \sqrt{x^2-9} dx$
22. $\int \frac{\sqrt{x^2-1}+x}{x(x^2-1)} dx$ 23. $\int \frac{\sqrt{3x^2-16}}{x} dx$ 24. $\int \frac{\sqrt{x^2-9}}{x} dx$
25. $\int \frac{dx}{x^2\sqrt{4x^2-3}}$ 26. $\int \frac{dx}{x^2\sqrt{5x^2-1}}$ 27. $\int \frac{dx}{x^2\sqrt{x^2-1}}$
28. $\int \sqrt{x^2-1} dx$ 29. $\int \sqrt{5x^2-4} dx$ 30. $\int \sqrt{9x^2-4} dx$