

ИДЗ - 1

**Найти неопределенные интегралы (в пунктах 1.1-1.5
результаты проверить дифференцированием)**

1.1

1. $\int \frac{3 + \sqrt[3]{x^2} - 2x}{\sqrt{x}} dx$

2. $\int \frac{3\sqrt{x} + 4x^2 - 5}{2x^2} dx$

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

4. $\int \frac{2\sqrt{x} - x^2 + 3}{\sqrt[3]{x}} dx$

5. $\int \frac{\sqrt[4]{x} - 2x + 5}{x^2} dx$

6. $\int \frac{2x^3 - \sqrt{x} + 4}{\sqrt{x}} dx$

7. $\int \left(\sqrt[3]{x} - \frac{2\sqrt[4]{x}}{x} + 3 \right) dx$

8. $\int \frac{3x^2 - \sqrt[5]{x} + 2}{x} dx$

9. $\int \frac{2x^3 - \sqrt{x^5} + 1}{\sqrt{x}} dx$

10. $\int \frac{2x^3 - \sqrt{x} + 4}{x^2} dx$

11. $\int \frac{\sqrt[6]{x^5} - 5x^2 + 3}{x} dx$

12. $\int \left(x\sqrt{x} - \frac{1}{\sqrt{x^3}} + 1 \right) dx$

13. $\int \left(x^2 - \frac{\sqrt[6]{x}}{x} - 3 \right) dx$

14. $\int \frac{\sqrt[3]{x^2} - 2x^5 + 3}{x} dx$

15. $\int \left(\frac{\sqrt[3]{x}}{x} + 2x^3 - 4 \right) dx$

16. $\int \frac{\sqrt{x^3} - 3x^4 + 2}{x} dx$

17. $\int \left(2x^3 - 3\sqrt{x^5} + \frac{4}{x} \right) dx$

18. $\int \frac{2x^3 - \sqrt{x^5} + 5}{x^2} dx$

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

20. $\int \frac{3x^4 - \sqrt[3]{x^2} + 1}{x^2} dx$

21. $\int \left(\sqrt[5]{x^2} - \frac{2}{x^3} + 4 \right) dx$

22. $\int \frac{\sqrt{x} - 2x^3 + 5}{x} dx$

23. $\int \frac{\sqrt[5]{x} - 2x^3 + 4}{x^2} dx$

24. $\int \left(\sqrt{x} - \frac{3x^2}{\sqrt{x^3}} + 2 \right) dx$

25. $\int \left(\sqrt[5]{x} - \frac{4}{x^5} + 2 \right) dx$

26. $\int \frac{\sqrt[7]{x^6} - 2x^2 + 3}{x} dx$

27. $\int \left(\frac{\sqrt[3]{x}}{x} - \frac{2}{x^3} + 1 \right) dx$

28. $\int \left(\frac{2x^2}{\sqrt{x}} - \frac{5}{x} + 6 \right) dx$

29. $\int \left(\frac{\sqrt[3]{x^2}}{x} - \frac{7}{x^3} + 5 \right) dx$

30. $\int \left(\frac{5x^2}{\sqrt{x}} - \sqrt[3]{x^2} + 2 \right) dx$

1.2

1. $\int \sqrt{3+x} dx$

2. $\int \sqrt[3]{1+x} dx$

3. $\int \sqrt[3]{(1+x)^2} dx$

4. $\int \frac{dx}{\sqrt{1+x}}$

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

6. $\int \sqrt{5-4x} dx$

7. $\int (1-4x)^7 dx$

8. $\int (1+4x)^5 dx$

9. $\int (1-3x)^4 dx$

10. $\int \sqrt{1+3x} dx$

11. $\int \sqrt[5]{3-2x} dx$

12. $\int \frac{dx}{\sqrt[3]{5+3x}}$

13. $\int \frac{dx}{\sqrt[3]{(1-4x)^5}}$

14. $\int \frac{dx}{\sqrt[3]{(3-4x)^2}}$

15. $\int \frac{dx}{\sqrt[3]{2-5x}}$

16. $\int \frac{dx}{\sqrt[3]{2+x}}$

17. $\int \sqrt[4]{1+3x} dx$

18. $\int \sqrt[3]{1+3x} dx$

19. $\int \frac{dx}{\sqrt[4]{(3-x)^5}}$

20. $\int \frac{dx}{\sqrt[3]{3+x}}$

21. $\int \frac{dx}{(2+x)^3}$

22. $\int \sqrt[3]{5-2x} dx$

23. $\int \sqrt{5-4x} dx$

24. $\int \sqrt[5]{(6-5x)^2} dx$

25. $\int \sqrt[4]{2-5x} dx$

26. $\int \sqrt{4-2x} dx$

27. $\int \sqrt{3-4x} dx$

28. $\int \sqrt[5]{3+2x} dx$

29. $\int \sqrt[4]{(3+5x)^3} dx$

30. $\int \sqrt[3]{(2-x)^2} dx$

1.3			1.4		
1. $\int \frac{dx}{3-x}$	11. $\int \frac{dx}{3x+4}$	21. $\int \frac{dx}{6+5x}$	1. $\int \sin(2-3x)dx$	11. $\int \sin(3-4x)dx$	21. $\int \cos(5x-6)dx$
2. $\int \frac{dx}{1-4x}$	12. $\int \frac{dx}{4x-2}$	22. $\int \frac{dx}{1-7x}$	2. $\int \sin(5-2x)dx$	12. $\int \cos(4x+3)dx$	22. $\int \sin(7x+1)dx$
3. $\int \frac{dx}{3x+9}$	13. $\int \frac{dx}{5-3x}$	23. $\int \frac{dx}{1+6x}$	3. $\int \cos(3+2x)dx$	13. $\int \cos(3-4x)dx$	23. $\int \cos(7x+3)dx$
4. $\int \frac{dx}{2-3x}$	14. $\int \frac{dx}{4-7x}$	24. $\int \frac{dx}{2+7x}$	4. $\int \cos(2+3x)dx$	14. $\int \cos(2+5x)dx$	24. $\int \sin(7-4x)dx$
5. $\int \frac{dx}{2+3x}$	15. $\int \frac{dx}{5x-3}$	25. $\int \frac{dx}{7-3x}$	5. $\int \cos(5-2x)dx$	15. $\int \cos(3x+5)dx$	25. $\int \cos(3x-7)dx$
6. $\int \frac{dx}{2-5x}$	16. $\int \frac{dx}{3-2x}$	26. $\int \frac{dx}{5-2x}$	6. $\int \sin(4-2x)dx$	16. $\int \sin(5x-3)dx$	26. $\int \sin(8x-5)dx$
7. $\int \frac{dx}{3x-2}$	17. $\int \frac{dx}{5+3x}$	27. $\int \frac{dx}{2x+7}$	7. $\int \cos(3-2x)dx$	17. $\int \sin(5-3x)dx$	27. $\int \cos(8x-4)dx$
8. $\int \frac{dx}{2x+3}$	18. $\int \frac{dx}{3-5x}$	28. $\int \frac{dx}{2x+9}$	8. $\int \cos(7x+3)dx$	18. $\int \sin(3x+6)dx$	28. $\int \sin(9x+1)dx$
9. $\int \frac{dx}{3x+4}$	19. $\int \frac{dx}{5+4x}$	29. $\int \frac{dx}{7x-3}$	9. $\int \sin(8x-3)dx$	19. $\int \cos(5x-8)dx$	29. $\int \cos(10x+3)dx$
10. $\int \frac{dx}{4-3x}$	20. $\int \frac{dx}{6-3x}$	30. $\int \frac{dx}{6x+1}$	10. $\int \sin(3+4x)dx$	20. $\int \cos(3x-7)dx$	30. $\int \sin(9x-7)dx$

1.5	1.6
1. $\int \frac{\sqrt{3}dx}{9x^2 - 3}$	11. $\int \frac{dx}{\sqrt{5x^2 + 3}}$
2. $\int \frac{dx}{\sqrt{9x^2 + 3}}$	12. $\int \frac{dx}{\sqrt{4 - 7x^2}}$
3. $\int \frac{9dx}{\sqrt{9x^2 - 3}}$	13. $\int \frac{\sqrt{5}dx}{\sqrt{3 - 4x^2}}$
4. $\int \frac{dx}{9x^2 + 3}$	14. $\int \frac{dx}{\sqrt{2x^2 - 9}}$
5. $\int \frac{dx}{\sqrt{3 - 9x^2}}$	15. $\int \frac{dx}{2x^2 + 7}$
6. $\int \frac{dx}{7x^2 - 4}$	16. $\int \frac{dx}{\sqrt{3x^2 + 1}}$
7. $\int \frac{3dx}{\sqrt{7x^2 - 4}}$	17. $\int \frac{dx}{3x^2 + 2}$
8. $\int \frac{dx}{5x^2 + 3}$	18. $\int \frac{\sqrt{2}dx}{\sqrt{7 - 2x^2}}$
9. $\int \frac{dx}{5x^2 - 3}$	19. $\int \frac{\sqrt{14}dx}{2x^2 - 7}$
10. $\int \frac{dx}{\sqrt{3 - 5x^2}}$	20. $\int \frac{dx}{8x^2 + 9}$
21. $\int \frac{dx}{3x^2 - 2}$	1. $\int \frac{2xdx}{\sqrt{5 - 4x^2}}$
22. $\int \frac{dx}{4x^2 + 3}$	2. $\int \frac{xdx}{\sqrt{5 - 3x^2}}$
23. $\int \frac{dx}{\sqrt{4x^2 + 3}}$	3. $\int \frac{3xdx}{4x^2 + 1}$
24. $\int \frac{dx}{\sqrt{3 - 4x^2}}$	4. $\int \frac{4xdx}{\sqrt{3 - 4x^2}}$
25. $\int \frac{dx}{\sqrt{9 - 8x^2}}$	5. $\int \frac{2xdx}{\sqrt{8x^2 - 9}}$
26. $\int \frac{dx}{4x^2 - 3}$	6. $\int \frac{4xdx}{\sqrt{4x^2 + 3}}$
27. $\int \frac{dx}{8x^2 - 9}$	7. $\int \frac{xdx}{\sqrt{9 - 8x^2}}$
28. $\int \frac{dx}{4x^2 + 7}$	8. $\int \frac{\sqrt{3}xdx}{\sqrt{3x^2 - 2}}$
29. $\int \frac{2dx}{4 + 3x^2}$	9. $\int \frac{2xdx}{\sqrt{3x^2 - 2}}$
30. $\int \frac{2dx}{\sqrt{4x^2 - 3}}$	10. $\int \frac{2xdx}{\sqrt{7 - 2x^2}}$

1.7			1.8		
1. $\int \frac{dx}{\sqrt{2-5x^2}}$	11. $\int \frac{dx}{3x^2-7}$	21. $\int \frac{dx}{\sqrt{3x^2+8}}$	1. $\int e^{2x-7} dx$	11. $\int e^{3-5x} dx$	21. $\int e^{8x-1} dx$
2. $\int \frac{dx}{2x^2-5}$	12. $\int \frac{dx}{3x^2+7}$	22. $\int \frac{dx}{\sqrt{3x^2+2}}$	2. $\int e^{3+5x} dx$	12. $\int e^{4x+3} dx$	22. $\int e^{2-6x} dx$
3. $\int \frac{dx}{\sqrt{7x^2-3}}$	13. $\int \frac{dx}{7x^2+6}$	23. $\int \frac{dx}{2x^2+7}$	3. $\int e^{2-3x} dx$	13. $\int e^{4x+5} dx$	23. $\int e^{2-4x} dx$
4. $\int \frac{dx}{5x^2+2}$	14. $\int \frac{dx}{\sqrt{7-3x^2}}$	24. $\int \frac{dx}{4x^2-3}$	4. $\int e^{2x+1} dx$	14. $\int e^{6x-1} dx$	24. $\int e^{3-6x} dx$
5. $\int \frac{dx}{2x^2+3}$	15. $\int \frac{dx}{6x^2+1}$	25. $\int \frac{dx}{3x^2+4}$	5. $\int e^{7x-2} dx$	15. $\int e^{5-2x} dx$	25. $\int e^{8x+1} dx$
6. $\int \frac{dx}{\sqrt{5x^2+1}}$	16. $\int \frac{dx}{6x^2-7}$	26. $\int \frac{dx}{\sqrt{8x^2-9}}$	6. $\int e^{5x+7} dx$	16. $\int e^{3-5x} dx$	26. $\int e^{4-5x} dx$
7. $\int \frac{dx}{2x^2+9}$	17. $\int \frac{dx}{\sqrt{5x^2-1}}$	27. $\int \frac{dx}{\sqrt{5-4x^2}}$	7. $\int e^{5x-7} dx$	17. $\int e^{4-3x} dx$	27. $\int e^{5-x} dx$
8. $\int \frac{dx}{\sqrt{9-2x^2}}$	18. $\int \frac{dx}{3x^2-5}$	28. $\int \frac{dx}{\sqrt{1-3x^2}}$	8. $\int e^{7-2x} dx$	18. $\int e^{1-4x} dx$	28. $\int e^{7+3x} dx$
9. $\int \frac{dx}{\sqrt{9x^2+2}}$	19. $\int \frac{dx}{\sqrt{2-3x^2}}$	29. $\int \frac{dx}{\sqrt{4x^2+5}}$	9. $\int e^{3-4x} dx$	19. $\int e^{2-5x} dx$	29. $\int e^{2x+3} dx$
10. $\int \frac{dx}{5x^2-4}$	20. $\int \frac{dx}{\sqrt{5-3x^2}}$	30. $\int \frac{dx}{3x^2-2}$	10. $\int e^{10x+2} dx$	20. $\int e^{6x-4} dx$	30. $\int e^{4-7x} dx$

1.9	1.10
1. $\int \frac{dx}{(2x+1)\sqrt[3]{\ln^2(2x+1)}}$	11. $\int \frac{\sqrt{\ln^5(x+1)}}{x+1} dx$
2. $\int \frac{dx}{(1-x)\sqrt[3]{\ln^2(1-x)}}$	12. $\int \frac{\sqrt[7]{\ln^2(x+1)}}{x+1} dx$
3. $\int \frac{\sqrt[3]{\ln^2(1-x)}}{x-1} dx$	13. $\int \frac{\sqrt{\ln^3(x+1)}}{x+1} dx$
4. $\int \frac{dx}{(1-x)\sqrt{\ln^3(1-x)}}$	14. $\int \frac{dx}{(1+x)\sqrt[5]{\ln(x+1)}}$
5. $\int \frac{\ln^3(1-x)}{x-1} dx$	15. $\int \frac{\sqrt{\ln^7(x+1)}}{x+1} dx$
6. $\int \frac{\sqrt{\ln(2x-1)}}{2x-1} dx$	16. $\int \frac{dx}{(x+2)\sqrt{\ln(x+2)}}$
7. $\int \frac{\sqrt[3]{\ln(3x+1)}}{3x+1} dx$	17. $\int \frac{\ln^4(3x+1)}{3x+1} dx$
8. $\int \frac{dx}{(x+1)\ln^2(x+1)}$	18. $\int \frac{dx}{(x-3)\ln^4(x-3)}$
9. $\int \frac{dx}{(x+1)\sqrt{\ln(x+1)}}$	19. $\int \frac{dx}{(x+5)\ln^3(x+5)}$
10. $\int \frac{\sqrt[5]{\ln^2(x+1)}}{x+1} dx$	20. $\int \frac{\ln^3(x-5)}{x-5} dx$
	21. $\int \frac{\sqrt[4]{\ln(x+4)}}{x+4} dx$
	22. $\int \frac{\ln^5(x-7)}{x-7} dx$
	23. $\int \frac{\sqrt{\ln^3(x+3)}}{x+3} dx$
	24. $\int \frac{dx}{\sqrt[3]{\cos x}}$
	25. $\int \frac{dx}{(x+3)\ln^4(x+3)}$
	26. $\int \frac{\sqrt{\ln^3(x+6)}}{x+6} dx$
	27. $\int \frac{dx}{(x-4)\ln^5(x-4)}$
	28. $\int \frac{\ln^5(x-8)}{x-8} dx$
	29. $\int \frac{\ln^6(x+9)}{x+9} dx$
	30. $\int \frac{\ln(3x+5)}{3x+5} dx$
	1. $\int \sin^4 2x \cos 2x dx$
	2. $\int \frac{\cos 2x}{\sin^3 2x} dx$
	3. $\int \frac{\sin 3x}{\cos^4 3x} dx$
	4. $\int \frac{\sin x}{\sqrt[3]{\cos x}} dx$
	5. $\int \frac{\sin 3x}{\cos^5 3x} dx$
	6. $\int \cos^7 x \sin x dx$
	7. $\int \frac{\cos x}{\sin x + 2} dx$
	8. $\int \frac{\cos x}{3 - \sin x} dx$
	9. $\int \frac{\sin x}{\sqrt{\cos x + 3}} dx$
	10. $\int \frac{\sin x}{\sqrt[3]{\cos x + 1}} dx$
	11. $\int \frac{\cos x}{\sqrt{(\sin x - 4)^3}} dx$
	12. $\int \frac{\sin 3x}{\cos^2 3x} dx$
	13. $\int \frac{\sin 5x}{\sqrt{\cos 5x}} dx$
	14. $\int \sin^3 4x \cos 4x dx$
	15. $\int \frac{\cos 4x}{\sin^3 4x} dx$
	16. $\int \sqrt[3]{\cos 2x} \sin 2x dx$
	17. $\int \sqrt{\cos^3 2x} \sin 2x dx$
	18. $\int \sin^3 5x \cos 5x dx$
	19. $\int \frac{\sin 4x}{\sqrt[3]{\cos^2 4x}} dx$
	20. $\int \frac{\cos 5x}{\sqrt{\sin^3 5x}} dx$
	21. $\int \frac{\sin 5x}{\cos^4 5x} dx$
	22. $\int \sqrt{\sin 7x} \cos 7x dx$
	23. $\int \sin^6 3x \cos 3x dx$
	24. $\int \frac{\cos 6x}{\sin^7 6x} dx$
	25. $\int \sqrt{\cos^5 2x} \sin 2x dx$
	26. $\int \sin^4 8x \cos 8x dx$
	27. $\int \sin^5 4x \cos 4x dx$
	28. $\int \frac{\sin 4x}{\sqrt[3]{\cos 4x}} dx$
	29. $\int \frac{\sin 2x}{\sqrt[3]{\cos^4 2x}} dx$
	30. $\int \frac{\cos 6x}{\sin^4 6x} dx$

1.11	1.12
1. $\int \frac{\sqrt[3]{\tan^2 x}}{\cos^2 x} dx$	11. $\int \frac{\sqrt[5]{\cot 3x}}{\sin^2 3x} dx$
2. $\int \frac{dx}{\cos^2 x \sqrt{\tan^3 x}}$	12. $\int \frac{\tan^4 7x dx}{\cos^2 7x}$
3. $\int \frac{dx}{\sin^2 x \cdot \cot^4 x}$	13. $\int \frac{\cot^5 6x dx}{\sin^2 6x}$
4. $\int \frac{\cot^5 2x dx}{\sin^2 2x}$	14. $\int \frac{\sqrt[3]{\tan^5 4x}}{\cos^2 4x} dx$
5. $\int \frac{\tan^3 4x dx}{\cos^2 4x}$	15. $\int \frac{\cot^4 3x dx}{\sin^2 3x}$
6. $\int \frac{\sqrt[3]{\tan 5x}}{\cos^2 5x} dx$	16. $\int \frac{dx}{\cos^2 4x \sqrt{\tan 4x}}$
7. $\int \frac{\sqrt[3]{\cot^2 x}}{\sin^2 x} dx$	17. $\int \frac{dx}{\sin^2 3x \cdot \cot^3 3x}$
8. $\int \frac{dx}{\cos^2 3x \cdot \tan^4 3x}$	18. $\int \frac{\tan 6x dx}{\cos^2 6x}$
9. $\int \frac{dx}{\sin^2 x \cdot \cot^3 x}$	19. $\int \frac{dx}{\sin^2 x \cdot \cot^3 x}$
10. $\int \frac{\sqrt{\cot 7x}}{\sin^2 7x} dx$	20. $\int \frac{\sqrt{\cot 4x}}{\sin^2 4x} dx$
	21. $\int \frac{\sqrt[5]{\cot 3x}}{\sin^2 4x} dx$
	22. $\int \frac{\sqrt[3]{\arcsin x}}{\sqrt{1-x^2}} dx$
	23. $\int \frac{\arccos^2 3x}{\sqrt{1-9x^2}} dx$
	24. $\int \frac{\arctg^3 2x}{1+4x^2} dx$
	25. $\int \frac{\sqrt[3]{\arccos^2 x}}{\sqrt{1-x^2}} dx$
	26. $\int \frac{dx}{(1+x^2) \arctg^3 x}$
	27. $\int \frac{\arccos^3 3x}{\sqrt{1-9x^2}} dx$
	28. $\int \frac{\arcsin^5 2x}{\sqrt{1-4x^2}} dx$
	29. $\int \frac{\sqrt[3]{\arctg^2 x}}{1+9x^2} dx$
	30. $\int \frac{dx}{(1+x^2) \sqrt{\arctg x}}$
	21. $\int \frac{dx}{(1+x^2) \arctg^5 x}$
	22. $\int \frac{\arccos^7 x}{\sqrt{1-x^2}} dx$
	23. $\int \frac{\sqrt[3]{\arccos 2x}}{\sqrt{1-4x^2}} dx$
	24. $\int \frac{\arccot^4 5x}{1+25x^2} dx$
	25. $\int \frac{\arcsin^2 5x}{\sqrt{1-25x^2}} dx$
	26. $\int \frac{dx}{\sqrt{1-25x^2} \arcsin 5x}$
	27. $\int \frac{\arctg^8 3x}{1+9x^2} dx$
	28. $\int \frac{\arccos^2 7x}{\sqrt{1-49x^2}} dx$
	29. $\int \frac{\sqrt[5]{\arctg^3 x}}{1+x^2} dx$
	30. $\int \frac{\arccot^4 x}{1+64x^2} dx$

1.13	1.14
1. $\int \frac{xdx}{e^{3x^2+4}}$	11. $\int e^{5x^4-1}x^3dx$
2. $\int \frac{xdx}{e^{x^2+3}}$	12. $\int e^{1-4x^2}xdx$
3. $\int e^{\cos x}\sin xdx$	13. $\int e^{3x^7+2}x^6dx$
4. $\int \frac{x^2dx}{e^{x^3+1}}$	14. $\int e^{2-5x^3}x^2dx$
5. $\int e^{2x^3-1}x^2dx$	15. $\int e^{4x^4+2}x^3dx$
6. $\int \frac{\sin xdx}{e^{\cos x}}$	16. $\int \frac{xdx}{e^{x^2+1}}$
7. $\int e^{7x^3+2}x^2dx$	17. $\int e^{3\cos x+2}\sin xdx$
8. $\int e^{3-x^3}x^2dx$	18. $\int e^{4\sin x-1}\cos xdx$
9. $\int e^{4x^4-8}x^3dx$	19. $\int e^{5x^5-3}x^4dx$
10. $\int \frac{dx}{\sqrt{1-x^2}e^{\arcsin x}}$	20. $\int e^{5-2x^2}xdx$
21. $\int e^{4-3x^8}x^7dx$	1. $\int \frac{x-1}{7x^2+4}dx$
22. $\int e^{\cos 2x}\sin 2xdx$	2. $\int \frac{1-2x}{5x^2-1}dx$
23. $\int e^{1-3x^2}xdx$	3. $\int \frac{2x+1}{5x^2+1}dx$
24. $\int \frac{e^{tgx}dx}{\cos^2 x}$	4. $\int \frac{x+3}{\sqrt{x^2+4}}dx$
25. $\int e^{x^7-2}x^6dx$	5. $\int \frac{3x-2}{2x^2+7}dx$
26. $\int e^{3x^3}x^2dx$	6. $\int \frac{5-x}{3x^2+1}dx$
27. $\int \frac{x^4dx}{e^{x^5+1}}$	7. $\int \frac{5+x}{2x^2-3}dx$
28. $\int \frac{xdx}{e^{3-2x^2}}$	8. $\int \frac{2x-5}{\sqrt{7x^2+3}}dx$
29. $\int e^{5-3x^2}xdx$	9. $\int \frac{2x-3}{\sqrt{x^2+9}}dx$
30. $\int e^{8-7x^9}x^8dx$	10. $\int \frac{3x-2}{3x^2-5}dx$
	11. $\int \frac{2x-1}{5-2x^2}dx$
	12. $\int \frac{2x+3}{1-3x^2}dx$
	13. $\int \frac{2x+3}{5x^2+2}dx$
	14. $\int \frac{x-3}{4x^2+1}dx$
	15. $\int \frac{x-3}{1-4x^2}dx$
	16. $\int \frac{3x-1}{4-x^2}dx$
	17. $\int \frac{5x-2}{x^2+9}dx$
	18. $\int \frac{2x+5}{\sqrt{5x^2+1}}dx$
	19. $\int \frac{1-2x}{\sqrt{3x^2+2}}dx$
	20. $\int \frac{2x-4}{x^2+16}dx$
	21. $\int \frac{2x-3}{\sqrt{4-x^2}}dx$
	22. $\int \frac{2x-1}{\sqrt{5-3x^2}}dx$
	23. $\int \frac{3x+4}{5-2x^2}dx$
	24. $\int \frac{3x+3}{\sqrt{1-x^2}}dx$
	25. $\int \frac{5x+2}{\sqrt{x^2+9}}dx$
	26. $\int \frac{3-2x}{x^2-8}dx$
	27. $\int \frac{x-5}{8-4x^2}dx$
	28. $\int \frac{x+4}{7x^2+3}dx$
	29. $\int \frac{3x+2}{\sqrt{2x^2-1}}dx$
	30. $\int \frac{x-5}{\sqrt{4-9x^2}}dx$

ИДЗ – 2

2.1					2.2				
1. $\int \frac{2-3x}{x^2+2} dx$	11. $\int \frac{4x-3}{3x^2-4} dx$	21. $\int \frac{x-5}{3-2x^2} dx$	1. $\int \frac{\sin x dx}{1+3\cos x}$	11. $\int \frac{(2x-5)dx}{x^2-5x+17}$	21. $\int \frac{(3x^2+1)dx}{x^3+x+10}$				
2. $\int \frac{3-5x}{\sqrt{1-x^2}} dx$	12. $\int \frac{5x+1}{\sqrt{x^2-6}} dx$	22. $\int \frac{x+4}{\sqrt{9-x^2}} dx$	2. $\int \frac{3x^3}{1-x^4} dx$	12. $\int \frac{7x^3}{2x^4-5} dx$	22. $\int \frac{x^5}{3x^6-7} dx$				
3. $\int \frac{8-13x}{\sqrt{x^2-1}} dx$	13. $\int \frac{x-3}{9x^2+7} dx$	23. $\int \frac{2x-7}{x^2-5} dx$	3. $\int \frac{\sin 3x dx}{3-\cos 3x}$	13. $\int \frac{\cos 3x dx}{\sqrt{\sin 3x-2}}$	23. $\int \frac{x^4}{\sqrt{x^5+3}} dx$				
4. $\int \frac{6x+1}{2x^2-1} dx$	14. $\int \frac{5-3x}{\sqrt{4-3x^2}} dx$	24. $\int \frac{7x-2}{\sqrt{x^2-1}} dx$	4. $\int \frac{e^x}{2e^x+3} dx$	14. $\int \frac{\sin 2x dx}{\sqrt{1+\cos^2 x}}$	24. $\int \frac{3x^2-2}{\sqrt{2x^3-4x}} dx$				
5. $\int \frac{x-2}{\sqrt{2-x^2}} dx$	15. $\int \frac{4-2x}{\sqrt{1-4x^2}} dx$	25. $\int \frac{1+3x}{\sqrt{x^2+1}} dx$	5. $\int \frac{\sin 2x dx}{\cos 2x-4}$	15. $\int \frac{\sin x dx}{1-3\cos x}$	25. $\int \frac{\cos 7x dx}{\sqrt{5-\sin 7x}}$				
6. $\int \frac{3-7x}{\sqrt{1-4x^2}} dx$	16. $\int \frac{5-x}{2+x^2} dx$	26. $\int \frac{x-5}{x^2+7} dx$	6. $\int \frac{e^x}{4-3e^x} dx$	16. $\int \frac{\sin 2x dx}{4-\sin^2 x}$	26. $\int \frac{\sin 4x dx}{\sqrt{\cos 4x+3}}$				
7. $\int \frac{5-3x}{\sqrt{2x^2+1}} dx$	17. $\int \frac{1+3x}{\sqrt{1+4x^2}} dx$	27. $\int \frac{3-7x}{1+x^2} dx$	7. $\int \frac{x^2}{7-5x^3} dx$	17. $\int \frac{e^{3x}}{e^{3x}-5} dx$	27. $\int \frac{12x^2+5x^4}{4x^3+x^5} dx$				
8. $\int \frac{1+x}{\sqrt{2-x^2}} dx$	18. $\int \frac{5-4x}{\sqrt{1-x^2}} dx$	28. $\int \frac{8-2x}{1+3x^2} dx$	8. $\int \frac{\sin 2x dx}{3\sin^2 x+4}$	18. $\int \frac{x^2}{7+3x^3} dx$	28. $\int \frac{4e^{2x}}{\sqrt{1-e^{2x}}} dx$				
9. $\int \frac{3x+2}{2x^2+1} dx$	19. $\int \frac{5x-1}{\sqrt{x^2-3}} dx$	29. $\int \frac{3x+7}{\sqrt{x^2+4}} dx$	9. $\int \frac{e^{2x}}{5+e^{2x}} dx$	19. $\int \frac{3x+3}{x^2+2x} dx$	29. $\int \frac{\sin 2x dx}{\sqrt{6-\cos^2 x}}$				
10. $\int \frac{1-5x}{1+25x^2} dx$	20. $\int \frac{1-3x}{4x^2-1} dx$	30. $\int \frac{2x-1}{\sqrt{3x^2-4}} dx$	10. $\int \frac{4x^3}{7+2x^4} dx$	20. $\int \frac{e^{2x}}{\sqrt{e^{2x}+3}} dx$	30. $\int \frac{7x}{\sqrt{5x^2-4}} dx$				

2.3			2.4		
1. $\int \frac{1-2x-x^3}{1+x^2} dx$	11. $\int \frac{x^4}{x^2-3} dx$	21. $\int \frac{1-2x^4}{x^2+1} dx$	1. $\int \sin^2(1-x) dx$	11. $\int (1-\cos x)^2 dx$	21. $\int (1-\cos 3x)^2 dx$
2. $\int \frac{7-x^2}{1-x} dx$	12. $\int \frac{x^3+5x}{1+x^2} dx$	22. $\int \frac{2x^3-3}{x-2} dx$	2. $\int \sin^3(1-x) dx$	12. $\int \sin^2(2x-1) dx$	22. $\int \cos^2 \frac{2}{5} x dx$
3. $\int \frac{x^3+2}{1+x^2} dx$	13. $\int \frac{x^2-5x+6}{x^2+4} dx$	23. $\int \frac{2x^2+5}{x+1} dx$	3. $\int \left(1-2\sin \frac{x}{5}\right)^2 dx$	13. $\int \sin^3 6x dx$	23. $\int \sin^3 5x dx$
4. $\int \frac{8x^3-1}{2x+1} dx$	14. $\int \frac{x^3-1}{x+3} dx$	24. $\int \frac{3x+x^3+1}{x^2+2} dx$	4. $\int \cos^3 5x \sin 5x dx$	14. $\int \sin^2 0.5x dx$	24. $\int \sin^4 x dx$
5. $\int \frac{x^5-2}{x^2-4} dx$	15. $\int \frac{x^3}{x^2-1} dx$	25. $\int \frac{x^2+x}{2-x} dx$	5. $\int \cos^3(1-x) dx$	15. $\int \sin^2 \left(\frac{x}{2}+1\right) dx$	25. $\int \cos^4 x dx$
6. $\int \frac{2x^4-3}{x^2+1} dx$	16. $\int \frac{x^4+1}{x^2+1} dx$	26. $\int \frac{2x^2+5}{x-7} dx$	6. $\int (3-\sin^2 2x) dx$	16. $\int \cos^2 2x dx$	26. $\int \cos^3 4x dx$
7. $\int \frac{x^3-1}{2x+1} dx$	17. $\int \frac{x^4-2x^2+1}{x^2+1} dx$	27. $\int \frac{2x^3+3}{x-1} dx$	7. $\int \sin^2 \frac{3}{2} x dx$	17. $\int \cos^2 3x dx$	27. $\int \cos^2 7x dx$
8. $\int \frac{x^5}{1-x^3} dx$	18. $\int \frac{x^4+2}{x^2-4} dx$	28. $\int \frac{1-x^4}{x^2+2} dx$	8. $\int (\cos x+3)^2 dx$	18. $\int \left(1+2\cos \frac{x}{2}\right)^2 dx$	28. $\int (\sin x-5)^2 dx$
9. $\int \frac{x^2}{x^2+3} dx$	19. $\int \frac{x^3-3}{x+5} dx$	29. $\int \frac{x^2+4}{x-3} dx$	9. $\int \cos^3(x+3) dx$	19. $\int \sin^4 2x dx$	29. $\int \sin^3 4x dx$
10. $\int \frac{6x^3+x^2-2x+1}{2x-1} dx$	20. $\int \frac{x^3+1}{x^2+1} dx$	30. $\int \frac{2x^2+3}{x^2-1} dx$	10. $\int \sin^3 \frac{4}{5} x dx$	20. $\int \sin^2 3x dx$	30. $\int \sin^2 \frac{3}{4} x dx$

2.5			2.6		
1. $\int \operatorname{tg}^2 x dx$	11. $\int \operatorname{ctg}^3 5x dx$	21. $\int \operatorname{ctg}^4 x dx$	1. $\int \sin 3x \cos x dx$	11. $\int \sin 5x \sin 7x dx$	21. $\int \cos 2x \cos 5x dx$
2. $\int \operatorname{ctg}^3(x-6) dx$	12. $\int \operatorname{ctg}^2 3x dx$	22. $\int \operatorname{tg}^2 \frac{x}{4} dx$	2. $\int \sin^5 2x \cos 2x dx$	12. $\int \sin 4x \cos 2x dx$	22. $\int \sin^2 2x \cos x dx$
3. $\int \operatorname{tg}^4 3x dx$	13. $\int \operatorname{tg}^3 \frac{x}{3} dx$	23. $\int \operatorname{tg}^4(x-6) dx$	3. $\int \sin^2 x \cos x dx$	13. $\int \cos^3 4x \sin 4x dx$	23. $\int \frac{\cos x}{\sin^4 x} dx$
4. $\int \operatorname{tg}^2 7x dx$	14. $\int (1 - \operatorname{tg} 2x)^2 dx$	24. $\int \operatorname{tg}^3 4x dx$	4. $\int \cos^3 \frac{5}{2}x \sin \frac{5}{2}x dx$	14. $\int \cos^3 2x \sin 2x dx$	24. $\int \sin 2x \sin 3x dx$
5. $\int \operatorname{tg}^5 x dx$	15. $\int \operatorname{tg}^5 2x dx$	25. $\int \operatorname{tg}^4 \frac{x}{4} dx$	5. $\int \sin \frac{x}{2} \cos \frac{x}{4} dx$	15. $\int \cos x \sin 9x dx$	25. $\int \sin x \cos^3 x dx$
6. $\int x \operatorname{tg}^2 x^2 dx$	16. $\int (2x + \operatorname{tg}^2 7x) dx$	26. $\int \operatorname{tg}^4(x+5) dx$	6. $\int \cos x \sin 9x dx$	16. $\int \sin 6x \cos 3x dx$	26. $\int \sin 5x \cos x dx$
7. $\int \operatorname{ctg}^3 x dx$	17. $\int \operatorname{tg}^4 \frac{2}{3} x dx$	27. $\int \operatorname{tg}^3(x-3) dx$	7. $\int \sin^4 2x \cos 2x dx$	17. $\int \sin 3x \cos 2x dx$	27. $\int \sin x \cos 4x dx$
8. $\int \operatorname{tg}^2 \frac{x}{2} dx$	18. $\int \operatorname{ctg}^2 \frac{x}{5} dx$	28. $\int \operatorname{tg}^2 \frac{7}{4} x dx$	8. $\int \sin \frac{x}{2} \cos \frac{3}{2} x dx$	18. $\int \sin^3 7x \cos 7x dx$	28. $\int \cos 3x \cos x dx$
9. $\int \operatorname{tg}^3 \frac{x}{2} dx$	19. $\int (1 - \operatorname{ctg} x) dx$	29. $\int \operatorname{tg}^2(5x+1) dx$	9. $\int \cos^5 x \sin x dx$	19. $\int \frac{\sin x}{\cos^3 x} dx$	29. $\int \cos^4 2x \sin 2x dx$
10. $\int \operatorname{tg}^2 4x dx$	20. $\int \operatorname{ctg}^3 8x dx$	30. $\int \operatorname{tg}^5 4x dx$	10. $\int \cos 2x \sin 3x dx$	20. $\int \frac{\cos 2x}{\sin^4 2x} dx$	30. $\int \cos 7x \cos 5x dx$

2.7			2.8		
1. $\int \frac{dx}{4x^2 - 5x + 4}$	11. $\int \frac{dx}{x^2 - 5x + 6}$	21. $\int \frac{dx}{2x^2 - 6x + 1}$	1. $\int \frac{dx}{\sqrt{4 + 8x - x^2}}$	11. $\int \frac{dx}{\sqrt{4x^2 - 8x + 3}}$	21. $\int \frac{dx}{\sqrt{2 - x - 2x^2}}$
2. $\int \frac{dx}{x^2 - 4x + 10}$	12. $\int \frac{dx}{2x - 3 - 4x^2}$	22. $\int \frac{dx}{2x^2 - 3x + 2}$	2. $\int \frac{dx}{\sqrt{3x^2 - 4x + 1}}$	12. $\int \frac{dx}{\sqrt{1 + 2x - x^2}}$	22. $\int \frac{dx}{\sqrt{x^2 + 3x - 1}}$
3. $\int \frac{dx}{2x^2 - 7x + 1}$	13. $\int \frac{dx}{3x^2 - 8x - 3}$	23. $\int \frac{dx}{x^2 + 7x + 11}$	3. $\int \frac{dx}{\sqrt{2 - 3x - 2x^2}}$	13. $\int \frac{dx}{\sqrt{4x^2 - x + 4}}$	23. $\int \frac{dx}{\sqrt{5 - 7x - 3x^2}}$
4. $\int \frac{dx}{x^2 + x - 6}$	14. $\int \frac{dx}{8 - 2x - x^2}$	24. $\int \frac{dx}{2x^2 - 3x + 1}$	4. $\int \frac{dx}{\sqrt{x^2 + 6x + 8}}$	14. $\int \frac{dx}{\sqrt{2 + 4x - 3x^2}}$	24. $\int \frac{dx}{\sqrt{3x^2 - x + 5}}$
5. $\int \frac{dx}{5x^2 + 2x + 7}$	15. $\int \frac{dx}{5x - x^2 - 6}$	25. $\int \frac{dx}{5x^2 - 10x + 25}$	5. $\int \frac{dx}{\sqrt{2 + 8x - 2x^2}}$	15. $\int \frac{dx}{\sqrt{4x^2 + 2x + 4}}$	25. $\int \frac{dx}{\sqrt{1 - x - x^2}}$
6. $\int \frac{dx}{2x^2 - 2x + 1}$	16. $\int \frac{dx}{x^2 + 4x + 25}$	26. $\int \frac{dx}{2x^2 + 6x + 3}$	6. $\int \frac{dx}{\sqrt{3 + 2x - 2x^2}}$	16. $\int \frac{dx}{\sqrt{3x + 2 - 2x^2}}$	26. $\int \frac{dx}{\sqrt{1 - 2x - x^2}}$
7. $\int \frac{dx}{2x^2 - 11x + 2}$	17. $\int \frac{dx}{2x^2 - 8x + 30}$	27. $\int \frac{dx}{x^2 - 6x + 8}$	7. $\int \frac{dx}{\sqrt{2 - 2x - 3x^2}}$	17. $\int \frac{dx}{\sqrt{2x^2 - 8x + 1}}$	27. $\int \frac{dx}{\sqrt{4 - 3x - x^2}}$
8. $\int \frac{dx}{2x^2 + x + 2}$	18. $\int \frac{dx}{3x^2 - 9x + 6}$	28. $\int \frac{dx}{1 - 2x - 3x^2}$	8. $\int \frac{dx}{\sqrt{1 + x - x^2}}$	18. $\int \frac{dx}{\sqrt{x^2 - 5x + 6}}$	28. $\int \frac{dx}{\sqrt{x^2 + 5x + 1}} dx$
9. $\int \frac{dx}{3x^2 + 12x - 3}$	19. $\int \frac{dx}{2x^2 - 2x + 5}$	29. $\int \frac{dx}{2x^2 + 3x + 6}$	9. $\int \frac{dx}{\sqrt{5x^2 - 10x + 4}}$	19. $\int \frac{dx}{\sqrt{3x - 2x^2}}$	29. $\int \frac{dx}{\sqrt{3 - x - x^2}}$
10. $\int \frac{dx}{2x^2 + 3x}$	20. $\int \frac{dx}{2x^2 - 3x - 2}$	30. $\int \frac{dx}{3x^2 + 5x + 1}$	10. $\int \frac{dx}{\sqrt{2x + 3 - x^2}}$	20. $\int \frac{dx}{\sqrt{2x^2 - x - 3}}$	30. $\int \frac{dx}{\sqrt{x^2 + 4x + 1}}$

2.9	2.10
1. $\int \frac{x+1}{2x^2+3x-4} dx$	1. $\int \frac{2x-13}{\sqrt{3x^2-3x-16}} dx$
2. $\int \frac{x+6}{3x^2+x+1} dx$	11. $\int \frac{x-4}{\sqrt{2x^2-x+7}} dx$
3. $\int \frac{2x-1}{3x^2-2x+6} dx$	12. $\int \frac{2x-1}{\sqrt{x^2-3x+4}} dx$
4. $\int \frac{x}{2x^2+x+5} dx$	13. $\int \frac{x-1}{\sqrt{2x^2-x+5}} dx$
5. $\int \frac{x+5}{x^2+x-2} dx$	4. $\int \frac{2x+1}{\sqrt{1+x-3x^2}} dx$
6. $\int \frac{3x-2}{5x^2-3x+2} dx$	5. $\int \frac{2x+6}{\sqrt{4x^2+8x+9}} dx$
7. $\int \frac{x+4}{2x^2-6x-8} dx$	6. $\int \frac{2x-10}{\sqrt{1+x-x^2}} dx$
8. $\int \frac{x+4}{2x^2-7x+1} dx$	7. $\int \frac{2x-8}{\sqrt{1-x+x^2}} dx$
9. $\int \frac{5x-2}{2x^2-5x+2} dx$	8. $\int \frac{3x+4}{\sqrt{x^2+6x+13}} dx$
10. $\int \frac{4x-1}{4x^2-4x+5} dx$	9. $\int \frac{3x-1}{\sqrt{2x^2-5x+1}} dx$
	10. $\int \frac{5x+2}{\sqrt{x^2+3x-4}} dx$
11. $\int \frac{x+1}{2x^2+x+1} dx$	11. $\int \frac{x-4}{\sqrt{2x^2-x+7}} dx$
12. $\int \frac{x+1}{3x^2-2x-3} dx$	12. $\int \frac{2x-1}{\sqrt{x^2-3x+4}} dx$
13. $\int \frac{4x+8}{4x^2+6x-13} dx$	13. $\int \frac{4x+1}{\sqrt{2+x-x^2}} dx$
14. $\int \frac{5x+1}{x^2-4x+1} dx$	14. $\int \frac{5x-3}{\sqrt{2x^2+4x-5}} dx$
15. $\int \frac{x}{2x^2+2x+5} dx$	15. $\int \frac{3x+2}{\sqrt{4+2x-x^2}} dx$
16. $\int \frac{x-3}{x^2-5x+4} dx$	16. $\int \frac{x-7}{\sqrt{3x^2-2x+1}} dx$
17. $\int \frac{2x-1}{2x^2+8x-6} dx$	17. $\int \frac{x+5}{\sqrt{3-6x-x^2}} dx$
18. $\int \frac{2-x}{4x^2+16x-12} dx$	18. $\int \frac{2x+4}{\sqrt{3x^2-5x+1}} dx$
19. $\int \frac{2x-1}{3x^2-6x+9} dx$	19. $\int \frac{7x-2}{\sqrt{x^2-5x+1}} dx$
20. $\int \frac{2x-1}{3+x-2x^2} dx$	20. $\int \frac{x-8}{\sqrt{4x^2+x-5}} dx$
21. $\int \frac{x-4}{3x^2+x-1} dx$	
22. $\int \frac{3x+1}{x^2-7x-2} dx$	
23. $\int \frac{x-5}{2x^2+x-4} dx$	
24. $\int \frac{2x+3}{3x^2+2x-7} dx$	
25. $\int \frac{x-3}{4x^2+2x-3} dx$	
26. $\int \frac{x+2}{3x^2-x+5} dx$	
27. $\int \frac{3x-2}{x^2+5x-1} dx$	
28. $\int \frac{x-7}{4x^2+3x-1} dx$	
29. $\int \frac{2x+1}{5x^2+2x+10} dx$	
30. $\int \frac{x-4}{5x^2-x+7} dx$	

ИДЗ – 3

3.1		3.2							
1. $\int \frac{\sqrt{1-x^2}}{x} dx$	11. $\int \frac{\sqrt{(4-x^2)^3}}{x^6} dx$	21. $\int \frac{dx}{x^2\sqrt{x^2+9}}$	1. $\int \frac{dx}{x\sqrt{1+x-x^2}}$	11. $\int \frac{dx}{(x+1)\sqrt{1+x^2}}$	21. $\int \frac{dx}{(x-1)\sqrt{x^2-x-1}}$				
2. $\int \frac{\sqrt{x^2-1}}{x} dx$	12. $\int \frac{dx}{\sqrt{(1+x^2)^5}}$	22. $\int x^2\sqrt{1-x^2} dx$	2. $\int \frac{dx}{(x+1)\sqrt{x^2-1}}$	12. $\int \frac{dx}{x\sqrt{x^2+x-2}}$	22. $\int \frac{dx}{(x-1)\sqrt{1+x-x^2}}$				
3. $\int \frac{\sqrt{x^2+4}}{x} dx$	13. $\int \frac{\sqrt{x^2-9}}{x} dx$	23. $\int x^3\sqrt{1-x^2} dx$	3. $\int \frac{dx}{(x-1)\sqrt{x^2-1}}$	13. $\int \frac{dx}{(x+1)\sqrt{x^2-x+1}}$	23. $\int \frac{dx}{(x+1)\sqrt{1-x-x^2}}$				
4. $\int \frac{\sqrt{1-x^2}}{x^4} dx$	14. $\int \frac{dx}{\sqrt{(x^2-1)^3}}$	24. $\int \frac{\sqrt{(4-x^2)^3}}{x^4} dx$	4. $\int \frac{dx}{x\sqrt{1-x^2}}$	14. $\int \frac{dx}{(x+1)\sqrt{x^2-x-1}}$	24. $\int \frac{dx}{(x-1)\sqrt{1-x-x^2}}$				
5. $\int \sqrt{4-x^2} dx$	15. $\int x^3\sqrt{9-x^2} dx$	25. $\int \frac{dx}{\sqrt{(4+x^2)^3}}$	5. $\int \frac{dx}{x\sqrt{1+x^2}}$	15. $\int \frac{dx}{(x+1)\sqrt{x^2+x+1}}$	25. $\int \frac{dx}{x\sqrt{1-x-x^2}}$				
6. $\int \frac{\sqrt{x^2+9}}{x} dx$	16. $\int \frac{dx}{x^2\sqrt{(x^2-1)^3}}$	26. $\int \frac{\sqrt{x^2+9}}{x^4} dx$	6. $\int \frac{dx}{x\sqrt{x^2-1}}$	16. $\int \frac{dx}{(x+1)\sqrt{1+x-x^2}}$	26. $\int \frac{dx}{x\sqrt{x^2+x-3}}$				
7. $\int \frac{\sqrt{x^2+4}}{x^2} dx$	17. $\int \frac{dx}{x^2\sqrt{x^2-1}}$	27. $\int \frac{dx}{\sqrt{(9+x^2)^3}}$	7. $\int \frac{dx}{(x-1)\sqrt{1-x^2}}$	17. $\int \frac{dx}{(x-1)\sqrt{x^2+x+1}}$	27. $\int \frac{dx}{(x+1)\sqrt{x^2+x-2}}$				
8. $\int \frac{\sqrt{4-x^2}}{x^4} dx$	18. $\int \frac{\sqrt{x^2-9}}{x^2} dx$	28. $\int \frac{x^2 dx}{\sqrt{9-x^2}}$	8. $\int \frac{dx}{x\sqrt{x^2-x+1}}$	18. $\int \frac{dx}{(x-1)\sqrt{x^2-x+1}}$	28. $\int \frac{dx}{x\sqrt{x^2-3x+2}}$				
9. $\int \frac{dx}{\sqrt{(1+x^2)^3}}$	19. $\int \frac{dx}{x^3\sqrt{x^2-1}}$	29. $\int \frac{\sqrt{16-x^2}}{x^4} dx$	9. $\int \frac{dx}{x\sqrt{x^2+x-1}}$	19. $\int \frac{dx}{(x+1)\sqrt{x^2+x-1}}$	29. $\int \frac{dx}{(x+1)\sqrt{2-x-x^2}}$				
10. $\int \frac{\sqrt{x^2+4}}{x^4} dx$	20. $\int \frac{\sqrt{9-x^2}}{x^4} dx$	30. $\int \frac{\sqrt{16-x^2}}{x^2} dx$	10. $\int \frac{dx}{x\sqrt{x^2-x-1}}$	20. $\int \frac{dx}{(x-1)\sqrt{x^2+x-1}}$	30. $\int \frac{dx}{x\sqrt{1-3x-2x^2}}$				

3.3			3.4
1. $\int \frac{\ln(\cos x)}{\cos^2 x} dx$	11. $\int \ln(x+4)dx$	21. $\int \sqrt{x} \ln x dx$	1. $\int \sqrt{1-x} \arccos \sqrt{x} dx$
2. $\int \cos(\ln x)dx$	12. $\int \frac{x \ln(x + \sqrt{1+x^2})}{\sqrt{1+x^2}} dx$	22. $\int \frac{\ln(\sin x)}{\cos^2 x} dx$	2. $\int \sqrt{1-x} \arcsin \sqrt{x} dx$
3. $\int \frac{\ln x}{x^2} dx$	13. $\int \frac{\ln(\sin x)}{\sin^2 x} dx$	23. $\int x \ln(x^2 + 1) dx$	3. $\int x \operatorname{arctg} 2x dx$
4. $\int \ln(x+2)dx$	14. $\int x^2 \ln(x+1)dx$	24. $\int x \ln^2 x dx$	4. $\int \arcsin \frac{x}{2} dx$
5. $\int \frac{\ln(\cos x)}{\sin^2 x} dx$	15. $\int \frac{\ln x \ln(\ln x)}{x} dx$	25. $\int x^2 \ln x dx$	5. $\int \frac{\arcsin x}{\sqrt{1-x}} dx$
6. $\int \frac{\ln(\ln x)}{x} dx$	16. $\int \ln(x^2 + 1)dx$	26. $\int x \ln(x+1)dx$	6. $\int \frac{\arcsin \sqrt{x}}{\sqrt{1-x}} dx$
7. $\int \ln^2 x dx$	17. $\int \frac{\ln x}{x^3} dx$	27. $\int \sin(\ln x)dx$	7. $\int \frac{x \operatorname{arctg} x}{\sqrt{1+x^2}} dx$
8. $\int \frac{\ln x}{\sqrt{x}} dx$	18. $\int \sqrt{x} \ln^2 x dx$	28. $\int (x^2 - 4) \sin 5x dx$	8. $\int \frac{x \arcsin x}{\sqrt{1-x^2}} dx$
9. $\int x \ln \frac{1-x}{1+x} dx$	19. $\int \ln \frac{1-x}{1+x} dx$	29. $\int \ln(x+5)dx$	9. $\int x \operatorname{arctg} x dx$
10. $\int \ln(x + \sqrt{1+x^2}) dx$	20. $\int (x^2 - x + 1) \ln x dx$	30. $\int \ln \frac{2-x}{2+x} dx$	10. $\int x \operatorname{arcctg} x dx$

3.5		
1. $\int x^2 \cos 2x dx$	11. $\int x^2 e^{-x} dx$	21. $\int (x^2 + 1) e^{-x} dx$
2. $\int x \sin^2 x dx$	12. $\int \frac{xdx}{\sin^2 x}$	22. $\int (x^2 - 1) e^x dx$
3. $\int x \sin x \cos x dx$	13. $\int \frac{xdx}{\cos^2 x}$	23. $\int x^2 \cos^2 x dx$
4. $\int x^2 (\sin 2x - 3) dx$	14. $\int x \operatorname{tg}^2 x dx$	24. $\int (x^2 + x) \sin x dx$
5. $\int x^2 (\sin x + 1) dx$	15. $\int (x^2 + 2) e^{-x} dx$	25. $\int (x^2 + x) \cos x dx$
6. $\int (x^2 + x) e^{-x} dx$	16. $\int x^2 \sin^2 x dx$	26. $\int (x^2 + 1) e^x dx$
7. $\int (x^2 + x) e^x dx$	17. $\int x^2 (\cos 2x + 3) dx$	27. $\int (x^2 - 1) e^{-x} dx$
8. $\int (x^2 - x + 1) e^{-x} dx$	18. $\int (x^2 + 5) e^x dx$	28. $\int x \cos^2 x dx$
9. $\int (x^2 - x + 1) e^x dx$	19. $\int (x^3 + 3) \sin x dx$	29. $\int \arcsin 9x dx$
10. $\int x \operatorname{ctg}^2 x dx$	20. $\int (x^2 - 3) \cos x dx$	30. $\int x \arctg 2x dx$

3.6		
1. $\int (x+1)e^{2x} dx$	11. $\int (x+5)\sin x dx$	21. $\int (x+6)\cos 4x dx$
2. $\int (x-2)e^x dx$	12. $\int (x-5)\cos x dx$	22. $\int (x-6)\sin \frac{x}{2} dx$
3. $\int (x-7)\cos 2x dx$	13. $\int (x+9)\sin x dx$	23. $\int (x+1)\cos 7x dx$
4. $\int (x-1)\cos 5x dx$	14. $\int (x+7)\sin 2x dx$	24. $\int (x+2)\sin \frac{x}{2} dx$
5. $\int (x+2)\cos 3x dx$	15. $\int (x+4)\sin 3x dx$	25. $\int x \sin \frac{x}{5} dx$
6. $\int (x-2)\cos 4x dx$	16. $\int (x+3)\sin 5x dx$	26. $\int (x+4)\cos \frac{x}{2} dx$
7. $\int (x-4)\sin 2x dx$	17. $\int (x-4)\cos 2x dx$	27. $\int (x+1)\sin \frac{x}{4} dx$
8. $\int (x-3)\cos x dx$	18. $\int (x-8)\sin x dx$	28. $\int (x+10)\sin 5x dx$
9. $\int (x+4)\sin 2x dx$	19. $\int (x+4)\cos 3x dx$	29. $\int (x-3)\cos \frac{x}{4} dx$
10. $\int x \sin 3x dx$	20. $\int (x+6)\sin 8x dx$	30. $\int (x-9)\cos \frac{x}{7} dx$

3.7				3.8
1. $\int \ln(x-5)dx$	11. $\int x \operatorname{arctg} x dx$	21. $\int x \sin(x+4)dx$	1. $\int \operatorname{arctg} 2x dx$	11. $\int x \cos(x-7)dx$
2. $\int \operatorname{arctg} 2x dx$	12. $\int x^2 e^{3x} dx$	22. $\int x \cos(x+9)dx$	2. $\int \arcsin 3x dx$	12. $\int x \sin(x-5)dx$
3. $\int x^2 e^{-x} dx$	13. $\int x \cos(x+4)dx$	23. $\int (x+3)e^{-x} dx$	3. $\int x \cos 7x dx$	13. $\int (x-4)e^x dx$
4. $\int (x+1)e^{-4x} dx$	14. $\int x \cos(x-2)dx$	24. $\int \arccos x dx$	4. $\int \arccos 2x dx$	14. $\int x e^{-6x} dx$
5. $\int x^2 e^{-2x} dx$	15. $\int x \cos(x+3)dx$	25. $\int (x^2 - 3)e^x dx$	5. $\int \operatorname{arctg} 8x dx$	15. $\int \operatorname{arctg} 7x dx$
6. $\int \operatorname{arctg} 3x dx$	16. $\int x e^{x+2} dx$	26. $\int x e^{-4x} dx$	6. $\int x \sin(x-2)dx$	16. $\int \arcsin 5x dx$
7. $\int x \cos 8x dx$	17. $\int x e^{-7x} dx$	27. $\int x \cos(x+7)dx$	7. $\int \arcsin 8x dx$	17. $\int \ln(x-7)dx$
8. $\int \operatorname{arctg} 4x dx$	18. $\int \arcsin 2x dx$	28. $\int x e^{-5x} dx$	8. $\int x \cos(x+5)dx$	18. $\int x \cos(x+6)dx$
9. $\int \arcsin 5x dx$	19. $\int x \sin(x+7)dx$	29. $\int x e^{x+4} dx$	9. $\int \arccos 7x dx$	19. $\int \operatorname{arctg} \frac{x}{2} dx$
10. $\int (x+1)e^{-x} dx$	20. $\int x \sin(x-4)dx$	30. $\int x \cos(2-x) dx$	10. $\int x \sin(x+3)dx$	20. $\int \ln(x+10)dx$

ИДЗ – 4

4.1		
1. $\int \frac{3x^2 + 20x + 9}{(x^2 + 4x + 3)(x + 5)} dx$ 2. $\int \frac{12dx}{(x - 2)(x^2 - 2x + 3)}$ 3. $\int \frac{43x - 67}{(x^2 - x - 12)(x - 1)} dx$ 4. $\int \frac{2x^4 + 8x^3 + 9x^2 - 7}{(x^2 + x - 2)(x + 3)} dx$ 5. $\int \frac{8dx}{(x + 3)(x^2 + 6x + 5)}$ 6. $\int \frac{2x^4 + 8x^3 - 45x - 61}{(x^2 + 5x + 6)(x - 1)} dx$ 7. $\int \frac{2x^4 - 7x^3 + 7x^2 - 8x}{(x^2 - 5x + 6)(x + 1)} dx$ 8. $\int \frac{2x^4 + 17x^3 + 32x^2 - 7x}{(x^2 + 4x + 3)(x + 5)} dx$ 9. $\int \frac{6x^2 + 6x - 6}{(x^2 + x - 2)(x + 1)} dx$ 10. $\int \frac{37x - 85}{(x^2 + 2x - 3)(x - 4)} dx$	11. $\int \frac{3x^2 + 3x - 24}{(x^2 - x - 2)(x - 3)} dx$ 12. $\int \frac{2x^4 - 7x^3 + 3x^2 + 20}{(x^2 - 2x - 3)(x - 2)} dx$ 13. $\int \frac{3x^2 - 15}{(x^2 + 5x + 6)(x - 1)} dx$ 14. $\int \frac{x^2 - 19x + 6}{(x^2 + 5x + 6)(x - 1)} dx$ 15. $\int \frac{6xdx}{x^3 + 2x^2 - x - 2}$ 16. $\int \frac{4x^2 + 32x + 52}{(x^2 + 6x + 5)(x + 3)} dx$ 17. $\int \frac{2x^2 + 41x - 91}{(x^2 + 2x - 3)(x - 4)} dx$ 18. $\int \frac{2x^4 + 17x^3 + 40x^2 + 37x + 36}{(x^2 + 8x + 15)(x + 1)} dx$ 19. $\int \frac{2x^4 + 8x^3 + 9x^2 - 7}{(x^2 + x - 2)(x + 3)} dx$ 20. $\int \frac{6x^2 dx}{(x - 1)(x^2 + 3x + 2)}$	21. $\int \frac{2x^2 - 26}{(x^2 + 4x + 3)(x + 5)} dx$ 22. $\int \frac{6x^4 dx}{(x^2 - 1)(x + 2)}$ 23. $\int \frac{2x^2 + 12x - 6}{(x^2 + 8x + 15)(x + 1)} dx$ 24. $\int \frac{2x^4 - 5x^3 - 15x^2 + 40x - 70}{(x^2 + 2x - 3)(x - 4)} dx$ 25. $\int \frac{2x^4 - 7x^3 + 2x^2 + 13}{(x^2 - 5x + 6)(x + 1)} dx$ 26. $\int \frac{6x^4 - 21x^2 + 3x + 24}{(x^2 + x - 2)(x + 1)} dx$ 27. $\int \frac{2x^4 - 3x^3 - 21x^2 - 26}{(x^2 - 5x + 4)(x + 3)} dx$ 28. $\int \frac{7x^2 - 17x}{(x^2 - 2x - 3)(x - 2)} dx$ 29. $\int \frac{6x^4 - 30x^2 + 30}{(x^2 - 1)(x + 2)} dx$ 30. $\int \frac{3x^2 - 17x + 2}{(x^2 + 5x + 6)(x - 1)} dx$

4.2

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

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

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

4. $\int \frac{x + 2}{x^3 - x^2} dx$

5. $\int \frac{4x^4 + 8x^3 - 3x - 3}{x^3 + 2x^2 + x} dx$

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

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

8. $\int \frac{2x^2 - 5x + 1}{x^3 - 2x^2 + x} dx$

9. $\int \frac{2x^2 - 2x - 1}{x^2 - x^3} dx$

10. $\int \frac{4x^4 + 8x^3 - x - 2}{x(x+1)^2} dx$

11. $\int \frac{2x^4 - 4x^3 + 2x^2 - 4x + 1}{x(x-1)^2} dx$

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

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

14. $\int \frac{2x^3 + 2x^2 + 4x + 3}{x^3 + x^2} dx$

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

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

17. $\int \frac{4x^4 + 8x^3 - 1}{(x^2 + x)(x + 1)} dx$

18. $\int \frac{2x^3 + 1}{x^2(x+1)} dx$

19. $\int \frac{x^3 - 3}{(x-1)(x^2 - 1)} dx$

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

21. $\int \frac{x + 2}{x^3 - 2x^2 + x} dx$

22. $\int \frac{2x^4 + 8x^3 - 7}{(x^2 + x)(x - 3)} dx$

23. $\int \frac{4xdx}{(x^2 - 1)(x + 1)}$

24. $\int \frac{dx}{x^3 - x^2}$

25. $\int \frac{7x - 3x^2 - 5}{x^3 - 2x^2 + x} dx$

26. $\int \frac{3x^2 - 7x + 2}{(x^2 - x)(x - 1)} dx$

27. $\int \frac{x^2 + x + 2}{x^3 + x^2} dx$

28. $\int \frac{dx}{x^3 + x^2}$

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

30. $\int \frac{2x^3 + 5x^2 - 1}{x^3 + x^2} dx$

4.3

1. $\int \frac{3x+13}{(x-1)(x^2+2x+5)} dx$

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

3. $\int \frac{12-6x}{(x+1)(x^2-4x+13)} dx$

4. $\int \frac{2x^2+2x+20}{(x^2+2x+5)(x-1)} dx$

5. $\int \frac{x^2+3x-6}{(x+1)(x^2+6x+13)} dx$

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

7. $\int \frac{36}{(x^2-2x+10)(x+2)} dx$

8. $\int \frac{7x-10}{x^3+8} dx$

9. $\int \frac{9x-9}{(x+1)(x^2-4x+13)} dx$

10. $\int \frac{4x^2+3x+17}{(x-1)(x^2+2x+5)} dx$

11. $\int \frac{4x+2}{x^4+4x^2} dx$

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

13. $\int \frac{4x-x^2-12}{x^3+8} dx$

14. $\int \frac{x^2-13x+40}{(x+1)(x^2-4x+13)} dx$

15. $\int \frac{3-9x}{x^3-1} dx$

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

17. $\int \frac{4x-10}{(x+2)(x^2-2x+10)} dx$

18. $\int \frac{x^2+23}{(x+1)(x^2+6x+13)} dx$

19. $\int \frac{2x^2+7x+7}{(x^2+2x+5)(x-1)} dx$

20. $\int \frac{19x-x^2-34}{(x+1)(x^2-4x+13)} dx$

21. $\int \frac{4x^2+38}{(x^2-2x+10)(x+2)} dx$

22. $\int \frac{8}{(x^2+6x+13)(x+1)} dx$

23. $\int \frac{2x^2+4x+20}{(x+1)(x^2-4x+13)} dx$

24. $\int \frac{5x+13}{(x+1)(x^2+6x+13)} dx$

25. $\int \frac{4x^2+x+10}{x^3+8} dx$

26. $\int \frac{4x^2+7x+5}{(x^2+2x+5)(x-1)} dx$

27. $\int \frac{3x^2+2x+8}{x^3-27} dx$

28. $\int \frac{2x+22}{(x+2)(x^2-2x+10)} dx$

29. $\int \frac{6xdx}{27+x^3}$

30. $\int \frac{5x^2+17x+36}{(x+1)(x^2+6x+13)} dx$

4.4

1. $\int \frac{5x dx}{x^4 + 3x^2 - 4}$

2. $\int \frac{2x^5 - 2x + 1}{1 - x^4} dx$

3. $\int \frac{x^4 + x^3 + 2x^2 + x + 2}{x^4 + 5x^2 + 4} dx$

4. $\int \frac{5dx}{x^4 + 3x^2 - 4}$

5. $\int \frac{x^3 + 8x - 2}{x^4 + 4x^2} dx$

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

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

8. $\int \frac{x^3 - x - 5}{x^4 + 3x^2 - 4} dx$

9. $\int \frac{x^3 - x - 1}{x^4 - x^2} dx$

10. $\int \frac{2x^2 - 7x + 10}{(x^3 - x^2 + 4x - 4)(x-1)} dx$

11. $\int \frac{5x^2 + 1}{x^4 + 4x^2} dx$

12. $\int \frac{x^3 - x + 2}{x^4 + x^2} dx$

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

14. $\int \frac{2x^5 - 2x^3 + x^2}{1 - x^4} dx$

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

16. $\int \frac{x^3 - 2x + 5}{x^4 - 1} dx$

17. $\int \frac{x^3 + 4x - 3}{x^4 + 4x^2} dx$

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

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

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

21. $\int \frac{2x^3 - 2x - 5}{x^4 + 3x^2 - 4} dx$

22. $\int \frac{3x - 8}{(x-1)^2(x^2 + 4)} dx$

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

24. $\int \frac{2 - 8x}{x^4 + 4x^2} dx$

25. $\int \frac{x^3 - x^2 + 4x}{x^4 - 1} dx$

26. $\int \frac{2x^3 + 8x - 3x^2 - 27}{x^4 + 13x^2 + 36} dx$

27. $\int \frac{5x^3 - x^2 + 21x - 9}{x^4 + 10x^2 + 9} dx$

28. $\int \frac{2x^5 - 2x^3 - x^2}{1 - x^4} dx$

29. $\int \frac{x^3 + x^2 + x - 1}{x^4 + 5x^2 + 4} dx$

30. $\int \frac{2x + 3}{(x-1)(x^3 - x^2 + 4x - 4)} dx$

4.5			4.6				
1. $\int \frac{dx}{2 + \sqrt{x+3}}$	11. $\int \frac{1+x}{x+\sqrt{x}} dx$	21. $\int \frac{x^3 dx}{\sqrt{x+2}}$	1. $\int \frac{1-\sqrt{x+1}}{(1+\sqrt[3]{x+1})\sqrt{x+1}} dx$	11. $\int \frac{\sqrt{x+3}}{1+\sqrt[3]{x+3}} dx$	21. $\int \frac{\sqrt{x}}{x-4\sqrt[3]{x^2}} dx$		
2. $\int \frac{xdx}{\sqrt{x+3}}$	12. $\int \frac{xdx}{\sqrt{x-1}}$	22. $\int \frac{\sqrt{x}dx}{x+10}$	2. $\int \frac{\sqrt[6]{x}+\sqrt{x}}{\sqrt{x+1}} dx$	12. $\int \frac{\sqrt[6]{x+3}}{\sqrt{x+3}+\sqrt[3]{x+3}} dx$	22. $\int \frac{x+\sqrt{x}+\sqrt[3]{x^2}}{x(1+\sqrt[3]{x})} dx$		
3. $\int \frac{x^2 dx}{\sqrt{x-3}}$	13. $\int \frac{\sqrt{x}dx}{x-1}$	23. $\int \frac{dx}{(x-1)\sqrt{x}}$	3. $\int \frac{\sqrt[3]{(x+1)^2}+\sqrt[6]{x+1}}{\sqrt{x+1}+\sqrt[3]{x+1}} dx$	13. $\int \frac{\sqrt[3]{x}+\sqrt{x}}{\sqrt{x}+\sqrt[6]{x}} dx$	23. $\int \frac{\sqrt{x}}{x-\sqrt[3]{x^2}} dx$		
4. $\int \frac{xdx}{2+\sqrt{x+4}}$	14. $\int \frac{dx}{3+\sqrt{x+5}}$	24. $\int \frac{dx}{1+\sqrt{x-2}}$	4. $\int \frac{x+\sqrt[3]{x^2}+\sqrt[6]{x}}{x(1+\sqrt[3]{x})} dx$	14. $\int \frac{x+1+\sqrt[3]{(x+1)^2}+\sqrt[6]{x+1}}{(x+1)(1+\sqrt[3]{x+1})} dx$	24. $\int \frac{\sqrt{x}}{3x+\sqrt[3]{x^2}} dx$		
5. $\int \frac{x^3 dx}{\sqrt{x+1}}$	15. $\int \frac{dx}{1+\sqrt{x-1}}$	25. $\int \frac{dx}{x\sqrt{x-2}}$	5. $\int \frac{(\sqrt[3]{x+1})(\sqrt{x+1})}{\sqrt[6]{x^5}} dx$	15. $\int \frac{\sqrt{x}-1}{\sqrt{x}(\sqrt[3]{x+1})} dx$	25. $\int \frac{x-\sqrt[3]{x^2}}{x(1+\sqrt[6]{x})} dx$		
6. $\int \frac{x+1}{x\sqrt{x+2}} dx$	16. $\int \frac{dx}{x\sqrt{x-7}}$	26. $\int \frac{x^2 dx}{\sqrt{x-2}}$	6. $\int \frac{\sqrt{2x+1}+\sqrt[3]{2x+1}}{\sqrt{2x+1}} dx$	16. $\int \frac{\sqrt{3x+1}+2}{\sqrt{3x+1}+2\sqrt[3]{3x+1}} dx$	26. $\int \frac{\sqrt{x}}{1+\sqrt[6]{x}} dx$		
7. $\int \frac{dx}{(x+1)\sqrt{x+4}}$	17. $\int \frac{x+1}{x\sqrt{x-1}} dx$	27. $\int \frac{x-1}{x\sqrt{x-2}} dx$	7. $\int \frac{\sqrt{x-1}}{\sqrt[3]{x-1}+\sqrt[6]{x-1}} dx$	17. $\int \frac{dx}{\sqrt[3]{(2x+1)^2}-\sqrt{2x+1}}$	27. $\int \frac{\sqrt{3x+1}-1}{\sqrt[3]{3x+1}+\sqrt{3x+1}} dx$		
8. $\int \frac{\sqrt{x+2}}{x-3} dx$	18. $\int \frac{x^3 dx}{\sqrt{x-7}}$	28. $\int \frac{x^3 dx}{\sqrt{x+6}}$	8. $\int \frac{\sqrt{x-1}-2\sqrt[3]{x-1}}{2\sqrt[3]{x-1}+\sqrt{x-1}} dx$	18. $\int \frac{\sqrt{x}-\sqrt[3]{x}}{\sqrt[3]{x}-\sqrt[6]{x}-1} dx$	28. $\int \frac{\sqrt{x}}{4x-\sqrt[3]{x^2}} dx$		
9. $\int \frac{dx}{\sqrt{x+3}}$	19. $\int \frac{x^2 dx}{\sqrt{x-4}}$	29. $\int \frac{dx}{3+\sqrt{x-6}}$	9. $\int \frac{\sqrt{x+3}}{\sqrt[3]{x+3}+\sqrt[6]{x+3}} dx$	19. $\int \frac{\sqrt{x}}{1-\sqrt[4]{x}} dx$	29. $\int \frac{\sqrt{x}}{1-\sqrt[3]{x}} dx$		
10. $\int \frac{dx}{\sqrt{x}(x+3)}$	20. $\int \frac{\sqrt{x+4}}{x} dx$	30. $\int \frac{dx}{2+\sqrt{x-8}}$	10. $\int \frac{\sqrt[6]{x-1}}{\sqrt[3]{x-1}+\sqrt{x-1}} dx$	20. $\int \frac{\sqrt[6]{3x+1}+1}{\sqrt{3x+1}-\sqrt[3]{3x+1}} dx$	30. $\int \frac{\sqrt{x+1}-1}{(\sqrt[6]{x+1}+1)\sqrt{x+1}} dx$		

4.7

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

2. $\int \frac{dx}{5-4\sin x+2\cos x}$

3. $\int \frac{3\sin x-2\cos x}{1+\cos x} dx$

4. $\int \frac{dx}{5+3\cos x-5\sin x}$

5. $\int \frac{dx}{10\sin x+5\cos x}$

6. $\int \frac{dx}{3+2\cos x-\sin x}$

7. $\int \frac{dx}{5-3\cos x}$

8. $\int \frac{dx}{8-4\sin x+7\cos x}$

9. $\int \frac{dx}{3+5\cos x}$

10. $\int \frac{dx}{2\sin x+3\cos x+3}$

11. $\int \frac{dx}{5+4\sin x}$

12. $\int \frac{dx}{8+4\cos x}$

13. $\int \frac{dx}{3\sin x-4\cos x}$

14. $\int \frac{dx}{7\sin x-3\cos x}$

15. $\int \frac{dx}{2+4\sin x+3\cos x}$

16. $\int \frac{dx}{3\sin x+4\cos x}$

17. $\int \frac{2-\sin x+3\cos x}{1+\cos x} dx$

18. $\int \frac{dx}{5+\sin x+3\cos x}$

19. $\int \frac{dx}{4\sin x+3\cos x+5}$

20. $\int \frac{7+6\sin x-5\cos x}{1+\cos x} dx$

21. $\int \frac{dx}{3+\sin x+\cos x}$

22. $\int \frac{6\sin x+\cos x}{1+\cos x} dx$

23. $\int \frac{dx}{3\cos x-4\sin x}$

24. $\int \frac{dx}{5+3\cos x}$

25. $\int \frac{dx}{4\sin x-6\cos x}$

26. $\int \frac{dx}{3+5\sin x+3\cos x}$

27. $\int \frac{dx}{\cos x-3\sin x}$

28. $\int \frac{dx}{4-4\sin x+3\cos x}$

29. $\int \frac{dx}{3\sin x-\cos x}$

30. $\int \frac{dx}{2-3\cos x+\sin x}$

4.8

1. $\int \frac{dx}{8\sin^2 x - 16\sin x \cos x}$

2. $\int \frac{dx}{16\sin^2 x - 8\sin x \cos x}$

3. $\int \frac{2\tan x + 3}{\sin^2 x + 2\cos^2 x} dx$

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

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

6. $\int \frac{\tan x}{1 - \cot^2 x} dx$

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

8. $\int \frac{dx}{7\cos^2 x + 2\sin^2 x}$

9. $\int \frac{\sin 2x dx}{\sin^4 x + \cos^4 x}$

10. $\int \frac{dx}{\sin^3 x \cos x}$

11. $\int \frac{dx}{1 + \sin^2 x}$

12. $\int \frac{dx}{4\sin^2 x + 8\sin x \cos x}$

13. $\int \frac{\sin 2x dx}{4\sin^4 x + \cos^4 x}$

14. $\int \frac{dx}{\sin^2 x - 4\sin x \cos x + 5\cos^2 x}$

15. $\int \frac{dx}{4\cos^2 x + 3\sin^2 x}$

16. $\int \frac{dx}{3\cos^2 x - 2}$

17. $\int \frac{dx}{\sin^2 x + \sin 2x + 3\cos^2 x}$

18. $\int \frac{dx}{3\cos^2 x - 2\sin^2 x}$

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

20. $\int \frac{dx}{\sin^2 x + 3\sin x \cos x - \cos^2 x}$

21. $\int \frac{\sin 2x dx}{\sin^4 x + 4\cos^4 x}$

22. $\int \frac{dx}{16\sin^2 x + 7\cos^2 x}$

23. $\int \frac{dx}{2\cos^2 x + 3}$

24. $\int \frac{dx}{3 - 2\sin^2 x}$

25. $\int \frac{3\tan x - 1}{\sin^2 x + 4\cos^2 x} dx$

26. $\int \frac{dx}{5 + 3\sin^2 x}$

27. $\int \frac{\cos^2 x dx}{1 - \sin^2 x}$

28. $\int \frac{dx}{2\sin^2 x - \sin 2x + \cos^2 x}$

29. $\int \frac{dx}{6 - 3\cos^2 x}$

30. $\int \frac{\sin^2 x dx}{3\sin^2 x - \cos^2 x}$

4.9

1. $\int \cos^4 3x \sin^2 3x dx$

2. $\int \sqrt[5]{\sin^4 x} \cos^3 x dx$

3. $\int \cos^3 x \sin^8 x dx$

4. $\int \cos^4 x \sin^3 x dx$

5. $\int \frac{\cos^3 x dx}{\sqrt[3]{\sin^4 x}}$

6. $\int \sqrt[5]{\sin^3 2x} \cos^3 2x dx$

7. $\int \frac{\cos^3 x dx}{\sqrt[5]{\sin^3 x}}$

8. $\int \frac{\cos^3 x dx}{\sqrt[5]{\cos^4 x}}$

9. $\int \frac{3 \sin^3 x dx}{\cos^4 x}$

10. $\int \cos^4 x \sin^5 x dx$

11. $\int \frac{\sin^3 x dx}{\sqrt[5]{\cos^3 x}}$

12. $\int \sqrt[3]{\cos^2 x} \sin^3 x dx$

13. $\int \sqrt[3]{\sin^2 x} \cos^3 x dx$

14. $\int \sqrt[5]{\cos^3 2x} \sin^3 2x dx$

15. $\int \frac{\cos^3 3x dx}{\sqrt[3]{\sin^2 3x}}$

16. $\int \cos^4 2x \sin^2 2x dx$

17. $\int \frac{\sin^3 x dx}{\sqrt[3]{\cos^2 x}}$

18. $\int \sqrt[5]{\cos^4 x} \sin^3 x dx$

19. $\int \sin^4 2x \cos^2 2x dx$

20. $\int \frac{\cos^3 2x dx}{\sqrt[3]{\sin^2 2x}}$

21. $\int \frac{\sin^3 2x dx}{\sqrt[3]{\cos^2 2x}}$

22. $\int \cos^3 x \sin^4 x dx$

23. $\int \cos^4 x \sin^2 x dx$

24. $\int \cos 2x \sin^4 x dx$

25. $\int \cos^8 x \sin^3 x dx$

26. $\int \frac{3 \cos^3 x dx}{\sin^4 x}$

27. $\int \sqrt[5]{\cos^3 x} \sin^5 x dx$

28. $\int \cos^5 x \sin^4 x dx$

29. $\int \cos^2 3x \sin^4 3x dx$

30. $\int \frac{\sin^3 5x dx}{\sqrt[4]{\cos^3 5x}}$