

Вариант 1

1. $\int (5x^2 - 6x) dx$

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

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

4. $\int \sin(5x) dx$

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

6. $\int x\sqrt{1-x^2} dx$

7. $\int \frac{dx}{x(5+3\ln x)}$

8. $\int x \sin 2x dx$

9. $\int x e^{-x/2} dx$

10. $\int \arcsin 4x dx$

11. $\int \cos(\ln x) dx$

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

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

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

15. $\int \frac{2x-1}{(x-1)(x-2)} dx$

16. $\int \frac{x^4}{x^3-8} dx$

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

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

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

20. $\int \sin 3x \cos 10x dx$

Вариант 2

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

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

3. $\int \frac{dx}{\sqrt{x^2-25}}$

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

5. $\int \frac{dx}{25-9x^2}$

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

7. $\int \frac{e^x dx}{1+e^x}$

8. $\int x \cos 2x dx$

9. $\int x^2 e^{-x} dx$

10. $\int \ln(x+1) dx$

11. $\int e^{-x} \sin 2x dx$

12. $\int \frac{x+2}{x^2+2x+10} dx$

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

14. $\int \frac{\sqrt[3]{x}+2}{(\sqrt[6]{x}+2\sqrt[3]{x}+\sqrt{x})\sqrt{x}} dx$

15. $\int \frac{xdx}{(x+1)(x+3)(x+5)}$

16. $\int \frac{x^5}{x^3-27} dx$

17. $\int \cos^2 2x \cdot \sin^2 2x dx$

18. $\int \cos^3 2x dx$

19. $\int \frac{1-\sin x}{1+\sin x} dx$

20. $\int \cos x \cos(3x) dx$

Вариант 3

1. $\int \left(3x^3 + \frac{4}{x^2} + e^x 5^x \right) dx$

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

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

4. $\int \frac{dx}{3x+1}$

5. $\int e^{-2x} dx$

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

7. $\int \frac{dx}{x\sqrt{4-\ln^2 x}}$

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

9. $\int x^2 e^{2x} dx$

10. $\int \frac{\ln x}{\sqrt[3]{x}} dx$

11. $\int e^x \sin 2x dx$

12. $\int \frac{xdx}{x^2-4x+5}$

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

14. $\int \frac{dx}{x\sqrt{x+2}}$

15. $\int \frac{3x^2-5x+12}{(x-1)(x-2)(x+3)} dx$

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

17. $\int \sin^3 2x \cos^2 2x dx$

18. $\int \cos^4 x dx$

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

20. $\int \sin 3x \sin 2x dx$

Вариант 4

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

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

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

4. $\int \cos(2x+3) dx$

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

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

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

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

9. $\int x e^{-2x} dx$

10. $\int \arccos 3x dx$

11. $\int e^{3x} \sin x dx$

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

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

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

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

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

17. $\int \sin^3 x dx$

18. $\int \sin^4 x dx$

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

20. $\int \sin 4x \cdot \cos 6x dx$

Вариант 5

1. $\int \left(4x^5 - \frac{3}{x^5} \right) dx$

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

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

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

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

6. $\int e^{tgx} \frac{dx}{\cos^2 x}$

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

8. $\int x^2 e^{-3x} dx$

9. $\int x \sin 3x dx$

10. $\int \arcsin 2x dx$

11. $\int e^x \cos 4x dx$

12. $\int \frac{5x+1}{x^2-6x+10} dx$

13. $\int \frac{3x-6}{\sqrt{x^2-6x+10}} dx$

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

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

16. $\int \frac{x^4}{x^4-1} dx$

17. $\int \cos^6 x dx$

18. $\int \sin 2x \cdot \cos^2 x dx$

19. $\int \frac{1-\cos x}{1+\cos x} dx$

20. $\int \sin 5x \cos x dx$

Вариант 6

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

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

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

4. $\int e^{2x+1} dx$

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

6. $\int x 5^{-x^2} dx$

7. $\int \frac{x^4 dx}{\sqrt{4+x^5}}$

8. $\int x \sin 5x dx$

9. $\int (x+1)e^{2x} dx$

10. $\int x \ln x dx$

11. $\int \sin(\ln x) dx$

12. $\int \frac{dx}{4x^2+8x+1}$

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

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

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

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

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

18. $\int \cos^2 2x dx$

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

20. $\int \cos 2x \sin 4x dx$

Вариант 7

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

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

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

4. $\int \frac{dx}{1 - 10x}$

5. $\int e^{\frac{x}{3}} dx$

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

7. $\int \frac{xdx}{1 + x^2}$

8. $\int x \sin \frac{x}{2} dx$

9. $\int x^2 e^{5x} dx$

10. $\int \operatorname{arctg} 4x dx$

11. $\int e^{3x} \cos 3x dx$

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

13. $\int \frac{xdx}{\sqrt{3 - 2x - x^2}}$

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

15. $\int \frac{1 - x}{x(x - 2)} dx$

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

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

18. $\int \sin^4 x dx$

19. $\int \frac{1 - \sin x}{\cos x} dx$

20. $\int \cos 3x \sin 2x dx$

Вариант 8

1. $\int (x^2 + 8x + \sqrt[6]{x}) dx$

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

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

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

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

6. $\int 2x\sqrt{x^2 + 1} dx$

7. $\int \frac{x^3 dx}{\sqrt{1 - x^8}}$

8. $\int x \sin 5x dx$

9. $\int (2x + 1)e^x dx$

10. $\int \arcsin 4x dx$

11. $\int e^{-x} \cos 2x dx$

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

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

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

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

16. $\int \frac{11x + 16}{(x - 1)(x + 2)} dx$

17. $\int (1 + \cos x)^3 dx$

18. $\int \sin^4 \frac{x}{2} dx$

19. $\int \frac{dx}{\sin 3x}$

20. $\int \sin 2x \sin 4x dx$

Вариант 9

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

2. $\int tg^2 x dx$

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

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

5. $\int \sin(3x-5) dx$

6. $\int \frac{dx}{\cos^2 x \sqrt{1+tg x}}$

7. $\int \frac{\ln^2 x dx}{x(1+\ln^6 x)}$

8. $\int x \cos 2x dx$

9. $\int x e^{2x} dx$

10. $\int \operatorname{arctg} \frac{x}{2} dx$

11. $\int e^{2x} \cos 3x dx$

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

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

14. $\int \frac{\sqrt{x}+2}{\sqrt[6]{x}+2\sqrt[3]{x}} dx$

15. $\int \frac{2x^2-x+5}{(x-1)(x+3)(x-7)} dx$

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

17. $\int \sin 2x \cos^2 x dx$

18. $\int \sin^2 2x dx$

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

20. $\int \sin 5x \sin 2x dx$

Вариант 10

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

2. $\int ctg^2 x dx$

3. $\int \frac{dx}{\sqrt{125+5x^2}}$

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

5. $\int \frac{dx}{\sin^2(8x+5)}$

6. $\int \frac{\cos x dx}{\sqrt{25+4 \sin^2 x}}$

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

8. $\int 2x \sin 5x dx$

9. $\int x e^{-3x} dx$

10. $\int 2x \ln^2 x dx$

11. $\int \sin(\ln x) dx$

12. $\int \frac{11x+16}{x^2-2x+5} dx$

13. $\int \frac{(x+5)}{\sqrt{3x^2+6x+15}} dx$

14. $\int \frac{x+3}{x\sqrt{x-4}} dx$

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

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

17. $\int \cos^5 x dx$

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

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

20. $\int \sin 5x \cos 4x dx$

Вариант 11

1. $\int (3x^4 - 5x) dx$

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

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

4. $\int \sin(6x) dx$

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

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

7. $\int \frac{dx}{x(3+5 \ln x)}$

8. $\int x \sin \frac{5x}{2} dx$

9. $\int x \cdot 2^{-5x} dx$

10. $\int \arccos 4x dx$

11. $\int e^x \sin 3x dx$

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

13. $\int \frac{dx}{\sqrt{9x^2-6x+2}}$

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

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

16. $\int \frac{x^2-5x+9}{x^2-5x+6} dx$

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

18. $\int \sin^2 x \cos^2 x dx$

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

20. $\int \sin 6x \cos 2x dx$

Вариант 12

1. $\int \left(2\sqrt{x} + \frac{7}{\sqrt{x}} \right) dx$

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

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

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

5. $\int \frac{dx}{9-25x^2}$

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

7. $\int \frac{e^x dx}{1-e^x}$

8. $\int x e^{5x} dx$

9. $\int x^2 \sin 3x dx$

10. $\int \ln^2 x dx$

11. $\int e^{-x} \cos 2x dx$

12. $\int \frac{2x+3}{x^2+2x+10} dx$

13. $\int \frac{dx}{\sqrt{9x^2-6x-3}}$

14. $\int \frac{\sqrt[3]{x}}{\sqrt[3]{x}-\sqrt{x}} dx$

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

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

17. $\int \sin^3 x dx$

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

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

20. $\int \sin \frac{x}{3} \sin \frac{x}{2} dx$

Вариант 13

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|-----|---|-----|---|
| 1. | $\int \left(2x^3 - \frac{5}{x^2} + e^x 2^x \right) dx$ | 11. | $\int e^{2x} \sin 3x dx$ |
| 2. | $\int \frac{(x+2)^3}{x} dx$ | 12. | $\int \frac{xdx}{x^2 + 4x + 13}$ |
| 3. | $\int \frac{dx}{\sqrt{x^2 + 10}}$ | 13. | $\int \frac{3x+5}{\sqrt{x^2 + 6x + 10}} dx$ |
| 4. | $\int \frac{xdx}{x^2 + 10}$ | 14. | $\int \frac{\sqrt{x+1} - 1}{\sqrt{x+1} + 1} dx$ |
| 5. | $\int e^{-3x} dx$ | 15. | $\int \frac{(x^3 - 2x) dx}{x^4 - 1}$ |
| 6. | $\int \frac{\arctg^4 x}{1+x^2} dx$ | 16. | $\int \frac{x^4 dx}{x^3 + 5x^2 - 4}$ |
| 7. | $\int \frac{dx}{x\sqrt{4 - \ln^2 x}}$ | 17. | $\int \sin^4 3x dx$ |
| 8. | $\int e^{2x-1} x dx$ | 18. | $\int \cos^3 x \sin^2 x dx$ |
| 9. | $\int (x^2 - 1) \sin 3x dx$ | 19. | $\int \frac{dx}{2 + 3 \cos x}$ |
| 10. | $\int \arctg 5x dx$ | 20. | $\int \sin x \sin 3x dx$ |

Вариант 14

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|-----|---|-----|--|
| 1. | $\int \left(8x^2 - \frac{1}{x} + \frac{3}{x^3} \right) dx$ | 11. | $\int e^{-x} \sin x dx$ |
| 2. | $\int \frac{(x-2)^2}{\sqrt{x}} dx$ | 12. | $\int \frac{x-1}{x^2 + x + 1} dx$ |
| 3. | $\int \frac{dx}{x^2 - 8}$ | 13. | $\int \frac{x-2}{\sqrt{x^2 + 4x + 6}} dx$ |
| 4. | $\int \cos(3x+2) dx$ | 14. | $\int \frac{\sqrt[6]{x}}{\sqrt[3]{x} - \sqrt{x}} dx$ |
| 5. | $\int 4^{3x+1} dx$ | 15. | $\int \frac{x-2}{(x-1)(x-3)} dx$ |
| 6. | $\int \frac{dx}{x \ln^5 x}$ | 16. | $\int \frac{x^3 dx}{x^3 + 5x^2 + 4x}$ |
| 7. | $\int \frac{\sin x dx}{4 + 9 \cos^2 x}$ | 17. | $\int \sin^2 3x dx$ |
| 8. | $\int x e^{-2x} dx$ | 18. | $\int \cos^3 3x dx$ |
| 9. | $\int x \cos 5x dx$ | 19. | $\int \frac{dx}{3 \sin + 2 \cos x}$ |
| 10. | $\int x \ln 2x dx$ | 20. | $\int \sin 3x \cos 7x dx$ |

Вариант 15

1. $\int \left(4x^6 - \frac{3}{x^6} \right) dx$

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

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

4. $\int (3x + 1)^{13} dx$

5. $\int \frac{dx}{3x + 8}$

6. $\int e^{\operatorname{tg} x} \frac{dx}{2 \cos^2 x}$

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

8. $\int x^2 \sin 2x dx$

9. $\int e^{-5x} x dx$

10. $\int x \cdot \operatorname{arctg} 5x dx$

11. $\int e^x \cos 4x dx$

12. $\int \frac{xdx}{x^2 + 8x + 17}$

13. $\int \frac{3x + 5}{\sqrt{x^2 - 6x + 10}} dx$

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

15. $\int \frac{xdx}{(x-1)^2(x-2)}$

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

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

18. $\int \cos^3 x dx$

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

20. $\int \cos 2x \sin 2x dx$

Вариант 16

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

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

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

4. $\int e^{4x+1} dx$

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

6. $\int x^3 5^{-x^4} dx$

7. $\int \frac{xdx}{\sqrt{4 + x^4}}$

8. $\int e^{-t} t dt$

9. $\int x \sin 2x dx$

10. $\int \frac{\ln^2 x}{x^2} dx$

11. $\int e^{2x} \cos x dx$

12. $\int \frac{8x - 11}{\sqrt{5 + 2x - x^2}} dx$

13. $\int \frac{2z + 5}{9z^2 + 6z + 2} dz$

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

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

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

17. $\int \cos^4 2x dx$

18. $\int \sin^3 x dx$

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

20. $\int \sin 5x \cos 4x dx$

Вариант 17

1. $\int \left(2\sqrt[3]{x} - \frac{25}{\sqrt[3]{x}} \right) dx$
2. $\int 7^x 2^{3x} dx$
3. $\int \frac{dx}{\sqrt{x^2 - 12}}$
4. $\int \frac{dx}{1 - 9x}$
5. $\int e^{\frac{x}{4}} dx$
6. $\int \frac{\arcsin^4 x}{\sqrt{1 - x^2}} dx$
7. $\int \frac{2x dx}{1 + x^2}$
8. $\int x \cos \frac{x}{3} dx$
9. $\int x^2 e^{5x} dx$
10. $\int \frac{\ln x}{\sqrt{x}} dx$
11. $\int \sin(\ln x) dx$
12. $\int \frac{2x - 8}{\sqrt{1 - x - x^2}} dx$
13. $\int \frac{x + 1}{4x^2 + 8x + 1} dx$
14. $\int \frac{dx}{1 + \sqrt[3]{x + 1}}$
15. $\int \frac{x dx}{x^3 + 1}$
16. $\int \frac{x^5 dx}{x^4 - 1}$
17. $\int \sin^6 x dx$
18. $\int \sin^3 x dx$
19. $\int \frac{dx}{3 + 5 \cos x}$
20. $\int \sin 5x \sin x dx$

Вариант 18

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

Вариант 19

1. $\int \left(\sqrt[5]{x} - \frac{1}{\sqrt[5]{x}} \right) dx$
2. $\int 3tg^2 x dx$
3. $\int \frac{dx}{\sqrt{3-11x^2}}$
4. $\int 3^{2-9x} dx$
5. $\int \sin(5x-3) dx$
6. $\int \frac{dx}{\cos^2 x \sqrt{3+tgx}}$
7. $\int \frac{\ln^3 x dx}{x(1+\ln^8 x)}$
8. $\int xe^{5x} dx$
9. $\int x^2 \sin \frac{x}{2} dx$
10. $\int \ln(x+1) dx$
11. $\int e^{5x} \cdot \sin x \cdot dx$
12. $\int \frac{x-7}{x^2+x+1} dx$
13. $\int \frac{3x+2}{\sqrt{x^2-6x+10}} dx$
14. $\int \frac{dx}{\sqrt{x+\sqrt[3]{x}}}$
15. $\int \frac{3x-2}{(x+1)(x^2+4x+3)} dx$
16. $\int \frac{x^5-4x}{x^3+8} dx$
17. $\int \sin^3 2x dx$
18. $\int \sin^4 2x dx$
19. $\int \frac{dx}{\cos x + 2 \sin x}$
20. $\int \cos 5x \cos 2x dx$

Вариант 20

1. $\int \frac{3-\sqrt{1-x^2}}{\sqrt{1-x^2}} dx$
2. $\int 4ctg^2 x dx$
3. $\int \frac{dx}{x^2-5}$
4. $\int \frac{dx}{(2x+5)^2}$
5. $\int \frac{dx}{\sin^2(5x+8)}$
6. $\int \frac{\cos x dx}{\sqrt{4+25 \sin^2 x}}$
7. $\int \frac{e^{2x} dx}{e^{4x}+4}$
8. $\int x \cos x dx$
9. $\int x^2 e^{3x} dx$
10. $\int x^3 \ln x dx$
11. $\int e^{2x} \cos x dx$
12. $\int \frac{2x+5}{9x^2+6x+2} dx$
13. $\int \frac{x+4}{\sqrt{5+2x-x^2}} dx$
14. $\int \frac{dx}{\sqrt{x}(1-\sqrt[3]{x})}$
15. $\int \frac{x^3+2x-2}{x^4+x^2} dx$
16. $\int \frac{x^5+2x+1}{x^3+4x^2-5x} dx$
17. $\int \cos^3 \frac{x}{6} dx$
18. $\int \sin^4 \frac{x}{6} dx$
19. $\int \frac{dx}{3+\cos x}$
20. $\int \sin 5x \cos 7x dx$

Вариант 21

1. $\int (6x^5 - 7x) dx$

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

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

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

5. $\int \frac{dx}{6x + 5}$

6. $\int x^3 \sqrt{1 - x^4} dx$

7. $\int \frac{dx}{x(2 + 5 \ln x)}$

8. $\int x \sin \frac{x}{4} dx$

9. $\int x^2 e^{-x} dx$

10. $\int \arccos 6x dx$

11. $\int e^{3x} \sin 2x dx$

12. $\int \frac{3x + 2}{x^2 - 6x + 10} dx$

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

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

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

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

17. $\int \sin^4 x dx$

18. $\int \cos^5 \frac{x}{2} dx$

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

20. $\int \sin 3x \cos 7x dx$

Вариант 22

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

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

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

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

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

6. $\int \cos^5 x \sin x dx$

7. $\int \frac{e^x dx}{1 - 2e^x}$

8. $\int x \cos 5x dx$

9. $\int (x^2 + x) e^x dx$

10. $\int x^2 \ln(x + 1) dx$

11. $\int e^{2x} \cos 3x dx$

12. $\int \frac{x - 4}{x^2 - 6x + 10} dx$

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

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

15. $\int \frac{xdx}{(x - 3)(x + 2)}$

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

17. $\int \sin^5 x dx$

18. $\int \sin^6 x dx$

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

20. $\int \sin 4x \cos 6x dx$

Вариант 23

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

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

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

4. $\int \frac{xdx}{\sqrt{x^2+12}}$

5. $\int e^{-4x} dx$

6. $\int \frac{\arctg^5 x}{1+x^2} dx$

7. $\int \frac{dx}{x\sqrt{6-\ln^2 x}}$

8. $\int x \sin \frac{x}{4} dx$

9. $\int x^2 e^{2x} dx$

10. $\int \ln(1+x^2) dx$

11. $\int e^x \sin 3x dx$

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

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

14. $\int \frac{dx}{\sqrt{x}(1+\sqrt[4]{x})}$

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

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

17. $\int \cos^3 x dx$

18. $\int \sin^4 x dx$

19. $\int \frac{dx}{\sin 7x}$

20. $\int \cos x \cos 3x dx$

Вариант 24

1. $\int \left(9x^2 - \frac{2}{x} + \frac{5}{x^3} \right) dx$

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

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

4. $\int \cos(5x+2) dx$

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

6. $\int \frac{dx}{x \ln^9 x}$

7. $\int \frac{\sin x dx}{4+16 \cos^2 x}$

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

9. $\int e^x (3x+5) dx$

10. $\int \arctg 4x dx$

11. $\int e^x \cos 3x dx$

12. $\int \frac{3x+2}{x^2+6x+10} dx$

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

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

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

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

17. $\int \cos^5 \frac{x}{2} dx$

18. $\int \cos^6 x dx$

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

20. $\int \sin 3x \cos 7x dx$

Вариант 25

1. $\int \left(3x^5 - \frac{5}{x^5} \right) dx$

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

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

4. $\int (7x + 1)^{11} dx$

5. $\int \frac{dx}{3x + 14}$

6. $\int e^{tgx} \frac{dx}{3 \cos^2 x}$

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

8. $\int x \sin 4x dx$

9. $\int x^2 e^x dx$

10. $\int x^4 \ln x dx$

11. $\int e^x \cos 4x dx$

12. $\int \frac{4x - 1}{x^2 - 6x + 10} dx$

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

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

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

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

17. $\int \sin^5 x dx$

18. $\int \cos^4 x dx$

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

20. $\int \cos 4x \sin 6x dx$

Вариант 26

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

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

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

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

5. $\int \cos \frac{x}{4} dx$

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

7. $\int \frac{x^5 dx}{\sqrt{4 + x^{12}}}$

8. $\int x e^{\frac{x}{3}} dx$

9. $\int x \cos 4x dx$

10. $\int \arcsin \frac{x}{2} dx$

11. $\int e^{-x} \sin 2x dx$

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

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

14. $\int \frac{x - 1}{x\sqrt{x - 3}} dx$

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

16. $\int \frac{x^4}{x^3 - 8} dx$

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

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

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

20. $\int \sin 3x \cos 10x dx$

Вариант 27

1. $\int \left(3\sqrt[3]{x} - \frac{5}{\sqrt[3]{x}} \right) dx$

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

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

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

5. $\int \cos \frac{x}{4} dx$

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

7. $\int \frac{\arcsin^7 x}{\sqrt{1 - x^2}} dx$

8. $\int (x + 1) \cos 2x dx$

9. $\int x e^{-2x} dx$

10. $\int \ln(x + 1) dx$

11. $\int e^{-2x} \sin x dx$

12. $\int \frac{x + 2}{x^2 + 2x + 10} dx$

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

14. $\int \frac{\sqrt{x}}{1 - \sqrt[3]{x}} dx$

15. $\int \frac{xdx}{(x + 1)(x + 3)(x + 5)}$

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

17. $\int \cos^3 2x dx$

18. $\int (1 + \cos 2x) \sin^2 x dx$

19. $\int \frac{1 - \sin x}{1 + \sin x} dx$

20. $\int \cos x \cos(3x) dx$

Вариант 28

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

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

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

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

5. $\int 6^{\frac{x}{7}} dx$

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

7. $\int \frac{5x^4 dx}{\sqrt{1 - x^{10}}}$

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

9. $\int x^2 e^{2x} dx$

10. $\int \arccos 3x dx$

11. $\int e^x \sin 4x dx$

12. $\int \frac{xdx}{x^2 - 4x + 5}$

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

14. $\int \frac{dx}{x\sqrt{x + 2}}$

15. $\int \frac{3x^2 - 5x + 12}{(x - 1)(x - 2)(x + 3)} dx$

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

17. $\int \sin^3 2x \cos^2 2x dx$

18. $\int \cos^4 x dx$

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

20. $\int \sin 3x \sin 2x dx$