ИНТЕГРАЛ. XII.7.10.1-I

$$\int e^x dx = e^x + c, \ \int \frac{1}{x} dx = \ln|x| + c, \ \int \sin x dx = -\cos x + c$$

1. $\int e^{2x} dx =$	2. $\int e^{x+1} dx =$
3. $\int e^{3x+2} dx =$	4. $\int (e^x - 3) dx =$
5. $\int (e^x + 2x) dx =$	6. $\int (e^x - x) dx =$
7. $\int (1 - e^x) dx =$	8. $\int \frac{1}{2x} dx =$
9. $\int \frac{1}{nx} dx =$	10. $\int \frac{1}{x+2} dx =$
11. $\int \frac{1}{3x+4} dx =$	12. $\int \frac{2}{10x+3} dx =$
13. $\int \frac{c}{ax+b} dx =$	14. $\int \frac{1}{cx-d} dx =$
15. $\int \sin 2x dx =$	16. $\int \sin(-3x) dx =$

ИНТЕГРАЛ. XII.7.1-I

1. $\int \sin(x+5)dx =$	2. $\int \sin(x-1)dx =$
3. $\int \sin(-2x-3)dx =$	4. $\int \sin(ax+b)dx =$
5. $\int \cos 3x dx =$	6. $\int \cos(-2x)dx =$
7. $\int \cos(x-4)dx =$	8. $\int \cos(2x-6)dx =$
9. $\int \cos(-2x+5)dx =$	10. $\int \cos(7-3x)dx =$
11. $\int \cos(ax+b)dx =$	12. $\int 5\sec^2 x dx =$
13. $\int \sec^2 3x dx =$	14. $\int 5\sec^2 x dx =$
15. $\int \sec^2(x+1)dx =$	16. $\int \sec^2(2x+1)dx =$

Дасгалын дугаар	1	2	3	4	5	6	7	8	Нийт
Өөрийн үнэлгээ									
Багшийн үнэлгээ									

ИНТЕГРАЛ. XII.7.1-II

1. $\displaystyle\int e^{-x}dx =$	2. $\displaystyle\int e^{4x-3}dx =$
3. $\displaystyle\int 3e^{(3-2x)}dx =$	4. $\displaystyle\int (e^{-x}+e^{x+1})dx =$
5. $\displaystyle\int (e^{x}+\frac{1}{e^{3x}})dx =$	6. $\displaystyle\int \frac{e^{3x}+1}{e^{x}}dx =$
7. $\displaystyle\int_{0}^{1} e^{x}dx =$	8. $\displaystyle\int_{1}^{\ln 2} e^{x-1}dx =$
9. $\displaystyle\int_{0}^{1} e^{3-2x}dx =$	10. $\displaystyle\int_{0}^{1} (2e^{x}+\frac{1}{e^{x}})dx =$
11. $\displaystyle\int_{1}^{3} (e^{2x}-1)dx =$	12. $\displaystyle\int_{0}^{\ln 3} (e^{-2x}-\frac{1}{e^{x}})dx =$

ИНТЕГРАЛ. XII.7.1-II

13. $\int \dfrac{1}{2-3x}dx =$

14. $\int (\dfrac{1}{3x-2} + \dfrac{1}{2x-5})dx =$

15. $\int \dfrac{x^2+3x+4}{x}dx =$

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

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

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

19. $\int\limits_{0}^{2} \dfrac{1}{x+1}dx =$

20. $\int\limits_{-1}^{1} \dfrac{4}{3x+2}dx =$

21. $\int\limits_{0}^{5} \dfrac{3}{x-2}dx =$

22. $\int\limits_{1}^{4} (\dfrac{3}{x-2}-1)dx =$

ИНТЕГРАЛ. XII.7.1-II

23. $\int (\sin 2x + \cos 3x)dx =$

24. $\int (\sin \frac{x}{2} + \cos 5x)dx =$

25. $\int (3\sin x - 4\cos \frac{x}{2})dx =$

26. $\int 3\sin(x-4)dx =$

27. $\int 5\cos(3x+2)dx =$

28. $\int \left(\sin 2x + \cos \frac{x}{2} - \sec 3x \right)dx =$

29. $\int\limits_{0}^{\pi} \sin x dx =$

30. $\int\limits_{-\pi/2}^{\pi/2} \cos 2x dx =$

31. $\int\limits_{\pi/2}^{\pi} \cos ec^2 x dx =$

32. $\int\limits_{0}^{\pi/3} \sec^2 3x dx =$

ИНТЕГРАЛ. XII.10.2-I

$\int \dfrac{f'(x)}{f(x)}dx = \ln\left|f(x)\right| + C,$ Жишээ. $\int \dfrac{2}{2x-3}dx =$

$(2x-3)' = 2$ тул $\int \dfrac{2}{2x-3}dx = \ln\left|2x-3\right| + C$

1. $\int \dfrac{3}{x}dx =$	2. $\int \dfrac{3}{5x-2}dx =$
3. $\int \dfrac{x}{x^2-1}dx =$	4. $\int \dfrac{4x}{3x^2+8}dx =$
5. $\int \dfrac{3x^2}{x^3+7}dx =$	6. $\int \dfrac{6x^2}{4x^3+3}dx =$
7. $\int \dfrac{2x-3}{x^2-3x-1}dx =$	6. $\int \dfrac{2x-4}{x^2-4x-6}dx =$

ИНТЕГРАЛ. XII.10.2-I

9. $\int \dfrac{6x-7}{3x^2-7x-4}\,dx =$

10. $\int \dfrac{8x-6}{2x^2-3x+4}\,dx =$

11. $\int \dfrac{2x-6}{\frac{1}{2}x^2-3x+8}\,dx =$

12. $\int \dfrac{e^x}{e^x+1}\,dx =$

5. $\int \dfrac{e^x}{5+e^x}\,dx =$

7. $\int \dfrac{2e^x}{2e^x+3}\,dx =$

ИНТЕГРАЛ. XII.10.2-II

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

2. $\int \dfrac{e^{x}+e^{-x}}{e^{x}-e^{-x}}dx =$

3. $\int \sin x \cos x\,dx =$

4. $\int \dfrac{\sin x}{\cos x}dx =$

5. $\int \dfrac{\cos x}{1+\sin x}dx =$

8. $\int \dfrac{\cos x+\sin x}{\sin x-\cos x}dx =$

ИНТЕГРАЛ. XII.10.2-I

6. $\int \dfrac{\sin^2 x}{tgx} dx =$

7. $\int \dfrac{\sin^2 x}{tgx} dx =$

8. $\int tg5xdx =$

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

5. $\int \dfrac{\ln x}{x} dx =$

9. $\int \sin^3 x \cos x dx =$

ИНТЕГРАЛ. XII.10.2-I

1. $\int \dfrac{\sin^2 x}{tgx} dx =$

9. $\int \dfrac{\sin^2 x}{tgx} dx =$

10. $\int tg5x dx =$

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

5. $\int \dfrac{\ln x}{x} dx =$

10. $\int \sin^3 x \cos x dx =$