

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

- A) $\frac{x^2}{2} + x + c$; B) $\frac{x^2}{2} - x + c$;
 C) $\ln(x-1) + x + c$; D) $\frac{x^3}{2} - x + c$

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

- A) $\ln|x + \sqrt{x^2-2}| + c$ B) $\sqrt{x^2-2} + c$
 C) $2\sqrt{x^2-2} + c$ D) $\frac{\sqrt{x^2-2}}{2} + c$

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

- A) $\frac{1}{x^4+2} + c$ B) $\frac{x^4}{4} + c$
 C) $\frac{\ln(x^2+4)}{4} + c$ D) $\frac{\ln(x^4+2)}{4} + c$

4. $\int (x+4)^2 dx =$

- A) $\frac{(x+4)^3}{3} + c$ B) $\frac{1}{4} \cdot \frac{(x+4)^3}{3} + c$
 C) $\frac{(x+4)^4}{4} + c$ D) $\frac{(x+4)^2}{2} + c$

5. $\int \sin(7x) dx =$

- A) $\frac{1}{7} \cos 7x + c$ B) $-\frac{1}{7} \cos 7x + c$
 C) $7 \cos x + c$ D) $-7 \cos x + c$

6. $\int e^{5x} dx =$

- A) $e^{5x} + c$ B) e^{5x}
 C) $5e^{5x} + c$ D) $\frac{1}{5} e^{5x} + c$

7. $\int \frac{1}{x^2-4} dx =$

- A) $\frac{1}{4} \ln \left| \frac{x-2}{x+2} \right| + c$ B) $\frac{1}{2} \ln \left| \frac{x-2}{x+2} \right| + c$
 C) $\frac{1}{4} \ln \left| \frac{x-4}{x+4} \right| + c$ D) $\frac{1}{4} \ln \left| \frac{x+2}{x-2} \right| + c$

8. $\int \frac{dx}{10x} =$

- A) $\ln|10x| + c$ B) $10 \ln|x| + c$
 C) $\frac{1}{10} \ln|x| + c$ D) $\frac{1}{10} \ln|10x| + c$

9. Jepet $f'(x)=3x^2-4x+8$ dhe $f(-1)=-5$. Gjeni $f(1)$

- A)13 B)-5
 C)-3 D)-10

10. $\int d(x + \sin x) =$

- A) $x + \sin x + c$ B) $1 + \cos x + c$
 C) $\frac{x^2}{2} - \cos x + c$ D) $\frac{x^2}{2} + \cos x + c$

11. Njehso integralet e pacaktuara:

- $(2x + \frac{1}{x^2}) dx$; $\sqrt[7]{x^5} dx$
 $(x-5) dx$; $(1 + \frac{1}{x} + \sin x) dx$
 $\frac{x^2+5x}{x} dx$; $\frac{\sin 2x}{\cos x} dx$

12. Njehso integralet e pacaktuara:

- $\frac{3}{4-3x} dx$; $(x+5)^7 dx$
 $\sqrt{4-3x} dx$; $\sqrt[3]{2x-1} dx$
 $e^{3x-1} dx$ $\cos^3 x \cdot \sin x dx$
 $\frac{x}{2x^2+3} dx$; $\frac{e^x}{1+e^x} dx$

13. Njehso integralet e pacaktuara:

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

14. Njehso integralet e pacaktuara:

- $xe^{5x+2} dx$
 $(2x+3)\cos x dx$;
 $x^2 \ln x dx$
 $(2x-1)\cos(1-3x) dx$;

15. Njehso integralet e pacaktuara:

- $\frac{9x^2+4}{2x-1} dx$ $\frac{4x^2-3x+5}{2-x} dx$
 $\frac{1-\sin^3 x}{\sin^2 x} dx$ $\frac{1-tg^2 x}{\sin^2 x} dx$
 $\frac{1-\cot g^2 x}{\cos^2 x} dx$ $\frac{\sqrt[3]{x+1}}{\sqrt{x}} dx$