1. $\int e^{x^4} 4x^3 dx$

integralinin eşiti nedir?

A) $4 \cdot e^{x^4} + c$ B) $e^{x^4} + c$ C) $3e^{x^4} + c$

D) $\frac{1}{4} \cdot e^{x^4} + c$ E) $\frac{1}{e^{x^4}} + c$

2. $\int e^{\sin x} \cdot \cos x \, dx$

integralinin eşiti nedir?

A) $e^{\sin x} + c$ B) $e^{\cos x} + c$ C) $e^{\tan x} + c$

D) $e^{\cot x} + c$ E) $e^{x} + c$

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

integralinin eşiti nedir?

A) $e^{\sin x} + c$ B) $e^{\cos^2 x} + c$ C) $e^{\sin^2 x} + c$

D) $e^{\cot x + c}$ E) $e^{\sin x \cdot \cos x} + c$

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

integralinin eşiti nedir?

A) $\ln(e^x - e^{-x}) + c$ B) $e^x - e^{-x} + c$

C) $\frac{(e^x - e^{-x})^2}{2} + c$ D) $\ln(e^{-x} - e^x) + c$

E) $\ln(e^x + e^{-x}) + c$

5. $\int (\tan^5 x \cdot \sec^2 x) dx$

integralinin eşiti nedir?

A) $\tan x + c$ B) $\frac{\tan^4 x}{4} + c$ C) $\frac{\tan^5 x}{5} + c$

D) $\frac{\tan^6 x}{6} + c$ E) $\frac{\tan^{-6} x}{6} + c$

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

integralinin eşiti nedir?

A) $e^{\sqrt{x+3}} + c$ B) $2e^{\sqrt{x+3}} + c$ C) $e^{-\sqrt{x+3}} + c$

D) $\frac{e^{\sqrt{x+3}}}{2} + c$ E) $\sqrt{x+3} + c$

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

integralinin eşiti nedir?

A) $\sqrt{x^3+2} + c$ B) $\frac{1}{2}\sqrt{x^3+2} + c$

C) $2\sqrt{x^3+2} + c$ D) $\frac{3}{2}(x^3+2)^{\frac{2}{3}} + c$

E) $\frac{1}{3} \cdot (x^3+2)^3 + c$

8. $\int (\cos^3 x \cdot \sin^2 x) dx$

integralinin eşiti nedir?

A) $\frac{\sin^3 x}{3} - \frac{\sin^5 x}{5} + c$ B) $\sin^3 x - \sin^5 x + c$

C) $\frac{\cos^3 x}{3} - \frac{\cos^5 x}{5} + c$ D) $\cos^3 x \cdot \sin^2 x + c$

E) $\sin^3 x \cdot \cos^2 x + c$

9. $\int \frac{1}{8x+3} dx$

integralinin eşiti nedir?

A) $\ln|8x+3| + c$ B) $8 \cdot \ln|8x+3| + c$ 8

C) $\ln|8x-3| + c$ D) $\frac{1}{8}\ln|8x+3| + c$

E) $\frac{1}{8} \cdot \ln|8x-3| + c$

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

integralinin eşiti nedir?

A) $\tan e^x + c$ B) $\cot e^x + c$

C) $\arcsin e^x + c$ D) $\arccos e^x + c$

E) $\arctan e^x + c$

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

integralinin eşiti nedir?

A) $\frac{\ln(2+3^x)}{\ln 3}+c$ B) $\ln\left(\frac{2+3^x}{3}\right)+c$

C) $\ln\left(\frac{3}{2^x+3}\right)+c$ D) $\ln\left(\frac{3}{3^x+2}\right)+c$

E) $\ln(3^x+2)+c$

12. $\int\left(\frac{\sqrt{2x+1}+\sqrt[3]{2x+1}}{\sqrt[6]{2x+1}}\right)dx$

integralinin eşiti nedir?

A) $(2x+1)^{\frac{4}{3}}+(2x+1)^{\frac{7}{6}}+c$

B) $(2x+1)^{\frac{3}{4}}+(2x+1)^{\frac{6}{7}}+c$

C) $\frac{3}{8}\cdot(2x+1)^{\frac{4}{3}}+\frac{3}{7}\cdot(2x+1)^{\frac{7}{6}}+c$

D) $\frac{3}{8}\cdot(2x+1)^{\frac{3}{4}}+\frac{7}{3}\cdot(2x+1)^{\frac{7}{6}}+c$

E) $\frac{4}{3}(2x+1)^{\frac{3}{4}}+\frac{6}{7}\cdot(2x+1)^{\frac{7}{6}}+c$ f

13. $\int(\cos 3x\cdot\cos 7x)dx$

integralinin eşiti nedir?

A) $\sin 4x+\sin 10x+c$

B) $\frac{1}{4}\cdot\sin 4x+\frac{1}{10}\cdot\cos 10x+c$

C) $\frac{1}{4}\cdot\sin 4x+\frac{1}{10}\cdot\sin 10x+c$

D) $\frac{1}{8}\cdot\sin 4x+\frac{1}{20}\cdot\sin 10x+c$

E) $\frac{1}{16}\cdot\sin 4x+\frac{1}{40}\cdot\sin 10x+c$

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

integralinin eşiti nedir?

A) $\arccos x+c$ B) $\frac{\arccos^2 x}{2}+c$

C) $\arcsin x+c$ D) $\frac{\arcsin^2 x}{2}+c$

E) $-\frac{\arccos^2 x}{2}+c$

15. $\int\frac{f'(x)}{f(x)}dx$

integralinin eşiti nedir?

A) $f(x)+c$ B) $f'(x)+c$ C) $\frac{f^2(x)}{2}+c$

D) $\frac{f'(x)}{2}$ E) $\ln|f(x)|+c$

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

integralinin sonucu nedir?

A) $\tan(1+\ln x)+c$ B) $\cot(1+\ln x)+c$

C) $\sin(1+\ln x)+c$ D) $\cos(1+\ln x)+c$

E) $\sec^2(1+\ln x)+c$

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

integralinin eşiti nedir?

A) $\arctan\frac{3x}{2}+c$ B) $\frac{1}{3}\cdot\arctan\frac{3x}{2}+c$

C) $\frac{1}{6}\cdot\arctan\left(\frac{3x}{2}\right)+c$ D) $\frac{2}{3}\cdot\arctan\left(\frac{3x}{2}\right)+c$

E) $\frac{1}{6}\cdot\operatorname{arccot}\left(\frac{3x}{2}\right)+c$

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

integralinin eşiti nedir?

A) $\arctan(6x)+c$ B) $\arctan(x+3)+c$

C) $\arctan(3x)+c$ D) $\operatorname{arccot}(x+3)+c$

E) $\arcsin(x+3)+c$

1.B **2.**A **3.**C **4.**E **5.**D **6.**B **7.**C **8.**A **9.**D **10.**E **11.**A **12.**C **13.**D **14.**E **15.**E **16.**A **17.**C **18.**B