

### Belirsiz İntegral - 2

1.  $\int (x^2 + x + 1)^7 \cdot (2x + 1) dx$

aşağıdakilerden hangisine eşittir?

- A)  $\frac{7}{6}(x^2 + x + 1)^6 + c$       B)  $\frac{(x^2 + x + 1)^6}{6} + c$   
C)  $\frac{(x^2 + x + 1)^7}{7} + c$       D)  $\frac{(x^2 + x + 1)^8}{8} + c$   
E)  $\frac{7(x^2 + x + 1)^8}{8} + c$

2.  $\int \sqrt{x^3 - x} \cdot (3x^2 - 1) dx$

aşağıdakilerden hangisine eşittir?

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

3.  $\int (x - 1)^7 \cdot (x + 1)^7 \cdot x dx$

aşağıdakilerden hangisine eşittir?

- A)  $(x^2 - 1)^8 + c$       B)  $\frac{(x^2 - 1)^8}{8} + c$   
C)  $\frac{(x^2 - 1)^8}{16} + c$       D)  $\frac{(x^2 + 1)^8}{8} + c$   
E)  $\frac{(x^2 + 1)^8}{16} + c$

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

aşağıdakilerden hangisine eşittir?

- A)  $\frac{(x^3 - 8)^4}{6} + c$       B)  $\frac{(x^3 - 8)^4}{12} + c$   
C)  $\frac{(x^3 + 8)^4}{4} + c$       D)  $\frac{(x^3 + 8)^4}{6} + c$   
E)  $\frac{(x^3 + 8)^4}{12} + c$

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

integraline  $u = \sqrt[12]{x+1}$  dönüşümü yapıldığında aşağıdakilerden hangisine eşittir?

- A)  $\frac{4}{5}u^{15} + \frac{12}{13}u^{13} + c$   
B)  $\frac{5}{4}u^{15} + \frac{12}{13}u^{13} + c$   
C)  $\frac{9}{10}u^{15} + \frac{12}{13}u^{13} + c$   
D)  $\frac{4}{5}u^{15} - \frac{12}{13}u^{13} + c$   
E)  $\frac{u^{15}}{15} + \frac{u^{13}}{13} + c$

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

aşağıdakilerden hangisine eşittir?

- A)  $(2x + 1)^{\frac{4}{3}} + c$       B)  $\frac{1}{8}(2x + 1)^{\frac{4}{3}} + c$   
C)  $\frac{1}{4}(2x + 1)^{\frac{4}{3}} + c$       D)  $\frac{3}{8}(2x + 1)^{\frac{4}{3}} + c$   
E)  $\frac{1}{2}(2x + 1)^{\frac{4}{3}} + c$

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7.  $\int 18(3x+7)^5 dx$

aşağıdakilerden hangisine eşittir?

- A)  $(3x+7)^5 + c$                       B)  $(3x+7)^6 + c$   
 C)  $\frac{(3x+7)^6}{3} + c$                       D)  $\frac{(3x+7)^6}{6} + c$   
 E)  $2(3x+7)^6 + c$

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

aşağıdakilerden hangisine eşittir?

- A)  $\frac{(2\sqrt{x}+3)^5}{5} + c$                       B)  $\frac{(2\sqrt{x}+3)^5}{4} + c$   
 C)  $\frac{(2\sqrt{x}+3)^5}{2} + c$                       D)  $(2\sqrt{x}+3)^5 + c$   
 E)  $2(2\sqrt{x}+3)^5 + c$

9.  $\int 6(f(x)+3)^2 \cdot f'(x) \cdot dx$

aşağıdakilerden hangisine eşittir?

- A)  $f^3(x) + c$                               B)  $2f^3(x) + c$   
 C)  $\frac{(f(x)+3)^3}{2} + c$                       D)  $(f(x)+3)^3 + c$   
 E)  $2(f(x)+3)^3 + c$

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

aşağıdakilerden hangisine eşittir?

- A)  $-(x^2+5x+2) + c$                       B)  $\frac{1}{(x^2+5x+2)^2} + c$   
 C)  $-\frac{1}{x^2+5x+2} + c$                       D)  $\frac{1}{x^2+5x+2} + c$   
 E)  $-\frac{1}{(x^2+5x+2)^2} + c$

11.  $36 \int (x^4+x^2)^8 \cdot (2x^3+x) dx$

aşağıdakilerden hangisine eşittir?

- A)  $\frac{(x^4+x^2)^{10}}{5} + c$                               B)  $2(x^4+x^2)^8 + c$   
 C)  $(x^4+x^2)^8 + c$                               D)  $(x^4+x^2)^9 + c$   
 E)  $2(x^4+x^2)^9 + c$

12.  $\int \sqrt{2x-3} \cdot (4x+5) dx$

integraline  $u = \sqrt{2x-3}$  dönüşümü yapıldığında aşağıdakilerden hangisine eşittir?

- A)  $u^5 + 11u^3 + c$                               B)  $\frac{1}{5}u^5 + \frac{11}{3}u^3 + c$   
 C)  $\frac{2}{5}u^5 + \frac{11}{2}u^3 + c$                               D)  $\frac{2}{5}u^5 + \frac{11}{3}u^3 + c$   
 E)  $\frac{1}{5}u^5 + \frac{1}{3}u^3 + c$

