



1.  $\int (8t^3 + 4t - 1) dt$   
integralinin eşiti aşağıdakilerden hangisidir?
- A)  $2t^4 + 2t^2 - t + c$  B)  $t^4 + t^2 + c$  C)  $t^4 + t^2 - t + c$   
D)  $2t^4 + t^2 - t + c$  E)  $4t^4 + 2t^2 - t + c$



2.  $\int_1^2 \frac{1}{x^2} dx$  integrali kaçadır?
- A)  $-\frac{1}{3}$  B) 0 C)  $\frac{1}{2}$  D)  $\frac{2}{3}$  E) 1



3.  $\int_1^2 (x-1)^2 dx$  integrali kaçadır?
- A)  $-\frac{1}{3}$  B) 0 C)  $\frac{2}{5}$  D)  $\frac{1}{3}$  E) 1



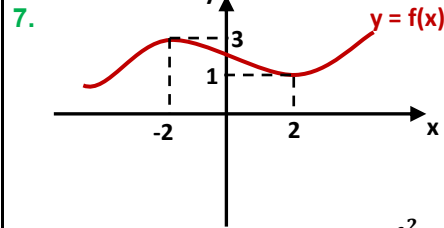
4.  $\int 6(x+1)(x-1) dx$  integrali kaçadır?
- A)  $x^3 - x + c$  B)  $x^2 - x + c$  C)  $3x^2 + 6x + c$   
D)  $\frac{x^3}{3} - x + c$  E)  $2x^3 - 6x + c$



5.  $\int_{-2}^2 \frac{6x^3 - 4x^2}{2x} dx$  integrali kaçadır?
- A) 8 B) 10 C) 12 D) 14 E) 16



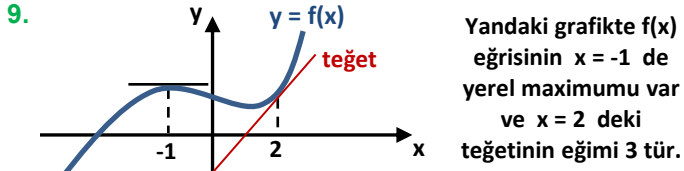
6.  $\int_a^b 3 dx = 15$   $\int_a^b 2x dx = 35$  ise b kaçtır?
- A) 4 B) 5 C) 6 D) 7 E) 8



Yukarıdaki grafiğe göre  $\int_{-2}^2 (f'(x) + 1) dx$  kaçtır?

- A) -6 B) -2 C) 2 D) 4 E) 6
8. Bir  $f(x)$  fonksiyonu için  
 $f'(x) = 3x^2 - x - 1$   
 $f(2) = 7$  ise  $f(0)$  kaçtır?
- A) 2 B) 3 C) 4 D) 5 E) 6





Buna göre  $\int_{-1}^2 (f''(x) + 3) dx$  kaçtır?

- A) 8 B) 9 C) 10 D) 11 E) 12



10.  $\int f(x+2) dx = x^2 + 6x - 7$   
ise  $f(3)$  kaçtır?

- A) 8 B) 11 C) 13 D) 15 E) 16



11.  $f(x) = \begin{cases} 2x & x > 2 \\ 3x^2 + 1 & x \leq 2 \end{cases}$  ise

$\int_0^3 f(x) dx$  kaçtır?

- A) 13 B) 14 C) 15 D) 16 E) 17



12.  $\int_0^4 |x-1| dx$   
integralinin değeri kaçtır?

- A) 1 B) 2 C) 3 D) 4 E) 5



13.  $\int_1^3 (|x-6| + |x+4|) dx$  integrali kaç eşittir?

- A) 2 B) 7 C) 12 D) 16 E) 20



14.  $2 \int_1^7 f(x) dx = 24$

$\int_1^3 f(x) dx + \int_3^7 f(x) dx$  integrali kaç eşittir?

- A) 0 B) 3 C) 6 D) 9 E) 12



15.  $\int_1^{10} \cos^2 x dx + \int_1^{10} \sin^2 x dx$

işleminin sonucu kaçtır?

- A) 8 B) 9 C) 10 D) 11 E) 12



16.  $\int_3^5 2 \cdot d(3x+1)$  integralinin değeri kaçtır?

- A) 8 B) 9 C) 10 D) 11 E) 12





17.  $\int_0^1 (x^2 + x)^3 (2x + 1) dx$  integrali kaç eştir?

- A) 4 B) 5 C) 6 D) 7 E) 8



18.  $\int (x^3 + 4x + 1)^9 (3x^2 + 4) dx$

integralinin eđiti ađađıdakilerden hangisidir?

- A)  $(x^3 + 4x + 1)^{10} + c$  B)  $\frac{(x^3 + 4x)^{10}}{10} + c$   
 C)  $(3x^2 + 4)^{10} + c$  D)  $\frac{(x^3 + 4x + 1)^9}{9} + c$   
 E)  $\frac{(x^3 + 4x + 1)^{10}}{10} + c$



19.  $\int \sqrt{4x^2 + 1} \cdot 8x dx$

integralinin eđiti ađađıdakilerden hangisidir?

- A)  $2x^3 + c$  B)  $\frac{2}{3} \sqrt{(4x^2 + 1)^3} + c$  C)  $(x^3 + 1)^3 + c$   
 D)  $\frac{1}{6} \sqrt{(4x^2 + 1)^3} + c$  E)  $\frac{2}{3} \sqrt{x^2 + 1} + c$



20.  $\int (x^2 + 8x - 1)^3 (x + 4) dx$  hangisine eđittir?

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



21.  $\int_1^2 \frac{6x^2 - 4}{(x^3 - 2x)^3} dx$  integrali kaç eştir?

- A) -2 B)  $-\frac{1}{8}$  C)  $-\frac{15}{16}$  D) 0 E)  $\frac{9}{8}$



22.  $4 \int_0^1 (x + 1)^3 dx$

integralinin eđiti ađađıdakilerden hangisidir?

- A) 11 B) 12 C) 13 D) 14 E) 15



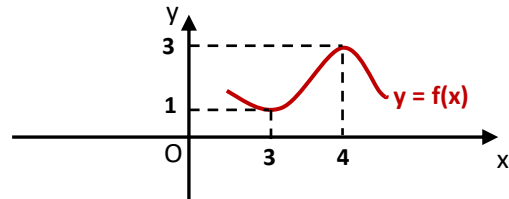
23.  $f(3) = 4$   $f(1) = 1$

$\int_1^3 (f(x))^2 f'(x) dx$  integrali kaç eştir?

- A) 21 B) 22 C) 23 D) 24 E) 25



24.



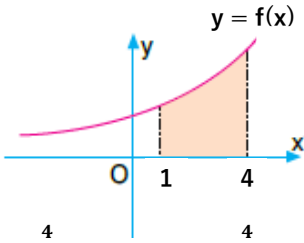
$\int_3^4 \frac{1}{f^2(x)} f'(x) dx$  integrali kaç eştir?

- A)  $\frac{1}{12}$  B)  $\frac{2}{9}$  C)  $\frac{1}{6}$  D)  $\frac{2}{3}$  E) 1





25.



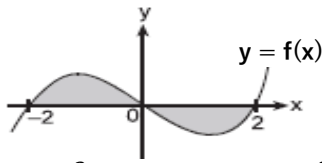
Yandaki taralı alanı aşağıdaki integrallerden hangisi ile hesaplayabiliriz?

A)  $\int_0^4 f(x)dx$     B)  $\int_1^4 f(x)dx$     C)  $-\int_1^4 f(x)dx$

D)  $\int_1^4 f^2(x)dx$     E)  $\int_0^4 f^2(x)dx$



26.



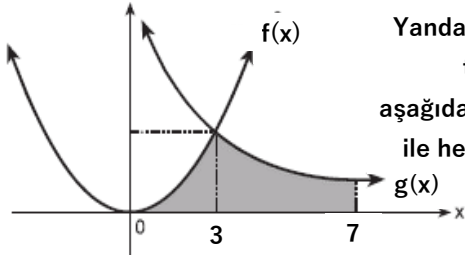
Yandaki taralı alanlar toplamını aşağıdakilerden hangisi ile hesaplayabiliriz?

A)  $\int_{-2}^2 f(x)dx$     B)  $\int_{-2}^0 f(x)dx - \int_0^2 f(x)dx$   
 C)  $-\int_{-2}^2 f(x)dx$     D)  $\int_{-2}^0 f(x)dx + \int_0^2 f(x)dx$

E)  $2 \int_{-2}^2 f^2(x)dx$



27.

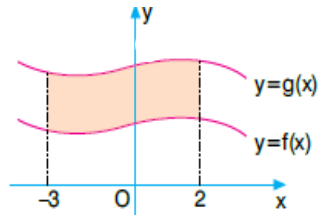


Yandaki taralı alanlar toplamını aşağıdakilerden hangisi ile hesaplayabiliriz?

A)  $\int_0^7 f(x) \cdot g(x)dx$     B)  $\int_0^7 \frac{f(x)}{g(x)}dx$     C)  $\int_3^7 g(x)dx$   
 D)  $\int_0^3 g(x)dx + \int_3^7 f(x)dx$     E)  $\int_0^3 f(x)dx + \int_3^7 g(x)dx$



28.



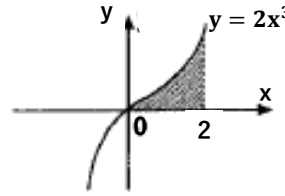
Yandaki taralı alanı aşağıdaki integrallerden hangisi ile hesaplayabiliriz?

A)  $\int_{-3}^2 [f(x)]^{g(x)}dx$     B)  $\int_{-3}^2 g(x) \cdot f(x)dx$     C)  $\int_{-3}^2 \frac{g(x)}{f(x)}dx$

D)  $\int_{-3}^2 [f(x) - g(x)]dx$     E)  $\int_{-3}^2 [g(x) - f(x)]dx$



29.

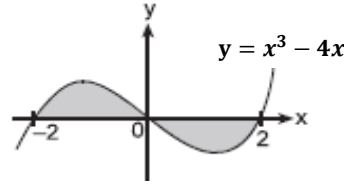


Yandaki taralı alan kaç br<sup>2</sup> dir ?

- A) 2    B) 4    C) 6    D) 8    E) 10



30.

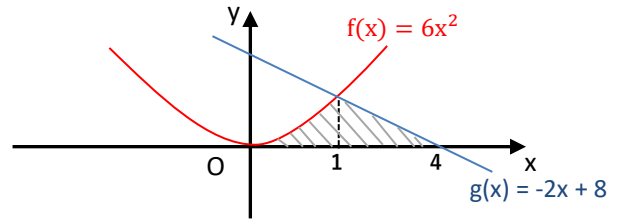


Yandaki taralı alanlar toplamı kaç br<sup>2</sup> dir ?

- A) 2    B) 4    C) 6    D) 8    E) 10



31.

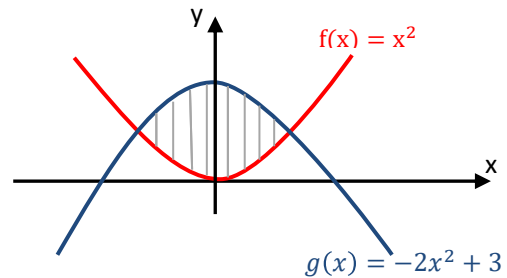


Yukarıdaki taralı alan kaç birimkaredir?

- A) 9    B) 10    C) 11    D) 12    E) 13



32.



Yukarıdaki taralı alan kaç birimkaredir?

- A) 2    B) 3    C) 4    D) 5    E) 6

