FONKSİYONLAR TEST-8

Özel Tanımlı Fonksiyonlar

1. $f(x)=\sqrt[3]{\dfrac{x^2-6x}{|x|-6}}+3x+5$

fonksiyonunun en geniş tanım aralığı aşağıdakilerden hangisidir?

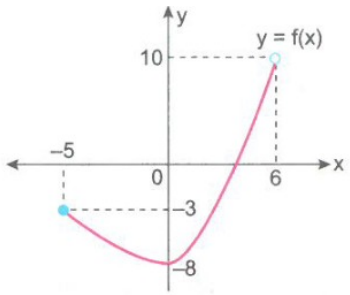
A) $R-\{-6, 6\}$ B) $R-(-6, 6)$ C) $(-6, 6)$
D) $(0, 6)$ E) $(-6, 0)$

2. $f:(-3,5] \longrightarrow R$
$f(x)=x^2-8x+21$

fonksiyonunun görüntü kümesindeki en küçük ve en büyük tam sayı değerlerinin toplamı kaçtır?

A) 55 B) 56 C) 57
D) 58 E) 59

3.



Yukarıdaki grafiği verilen y = f(x) fonksiyonunun görüntü kümesindeki tam sayıların toplamı kaçtır?

A) 10 B) 9 C) 8 D) 7 E) 6

4. $f(x)=\begin{cases}2x+3, & x>1\\ 5-x, & x\le 1\end{cases}$

olduğuna göre, f fonksiyonunun görüntü kümesi aşağıdakilerden hangisidir?

A) $(-\infty, 4]$ B) $(5, \infty)$ C) $[5, \infty)$
D) $[4, 5]$ E) $[4, \infty)$

5. $f(x)=\sqrt{5-|x-2|}$

fonksiyonunun en geniş tanım aralığı aşağıdakilerden hangisidir?

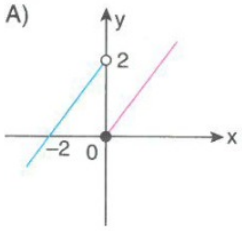
A) $[3, 7]$ B) $[-3, 7]$ C) $[-7, 3]$
D) $[-7, -3]$ E) $[-3, \infty)$

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

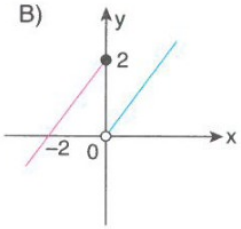
6. $f(x)=\begin{cases} x & , \ x \le 0 \\ x+2 & , \ x > 0 \end{cases}$

fonksiyonunun grafiği aşağıdakilerden hangisidir?

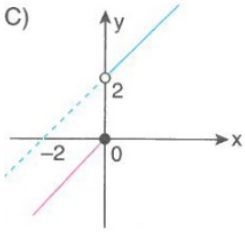
A)



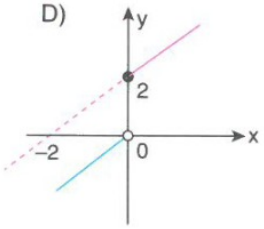
B)



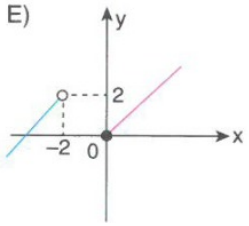
C)



D)



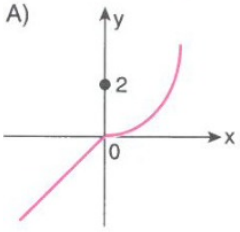
E)



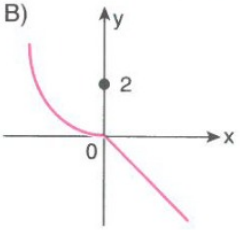
7. $f(x)=\begin{cases} x^2 & , \ x > 0 \\ 2 & , \ x = 0 \\ 2x & , \ x < 0 \end{cases}$

fonksiyonunun grafiği aşağıdakilerden hangisidir?

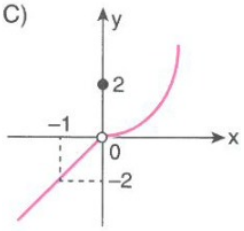
A)



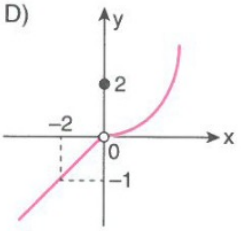
B)



C)



D)



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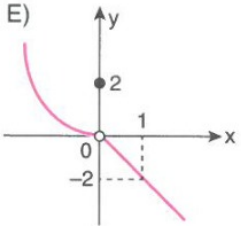
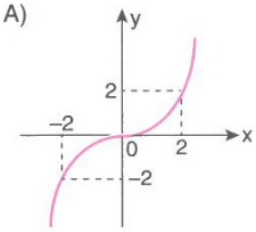
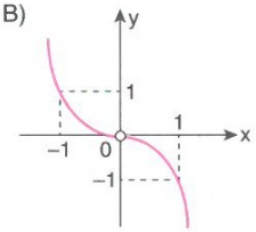
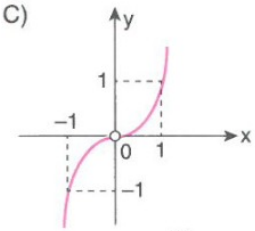


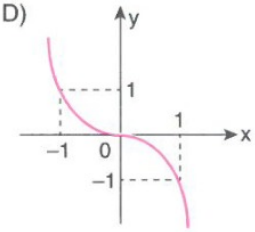
8. $f(x)=\begin{cases} x^2, & x>0 \\ -x^2, & x\le 0 \end{cases}$

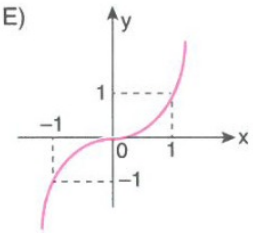
fonksiyonunun grafiği aşağıdakilerden hangisidir?

A)


B)


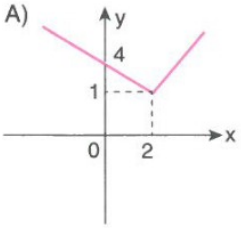
C)


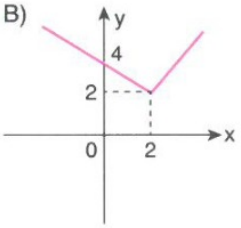
D)


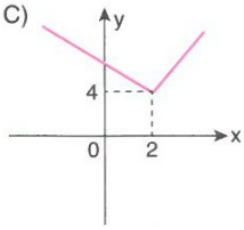
E)


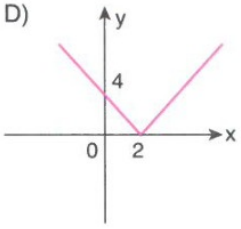
9. $f(x)=|x-2|+2$

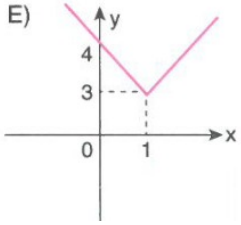
fonksiyonunun grafiği aşağıdakilerden hangisidir?

A)


B)


C)


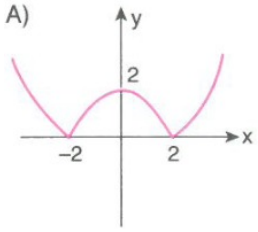
D)


E)


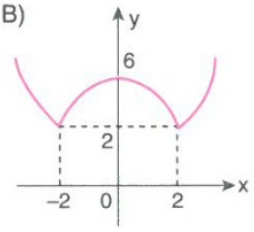
10. $f(x) = |x^2 - 4| + 2$

fonksiyonunun grafiği aşağıdakilerden hangisidir?

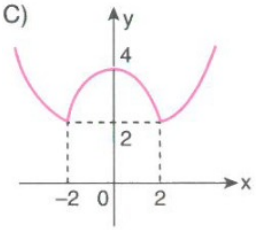
A)



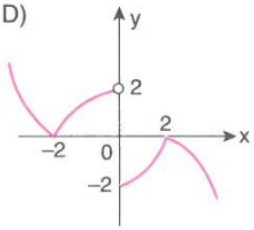
B)



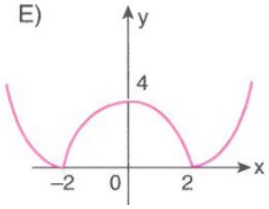
C)



D)



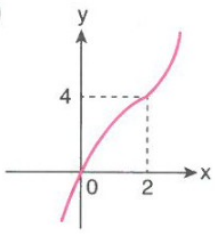
E)



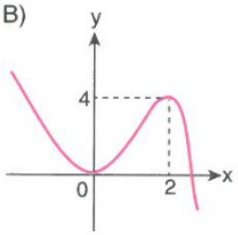
11. $f(x) = x \cdot |x - 2| + 2x$

fonksiyonunun grafiği aşağıdakilerden hangisidir?

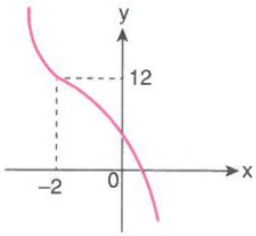
A)



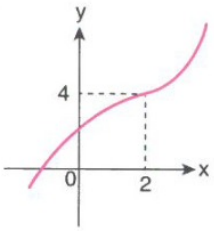
B)



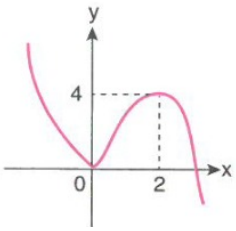
C)



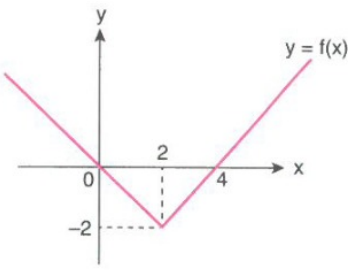
D)



E)



12. **Yandaki şekilde grafiği verilen fonksiyon aşağıdakilerden hangisidir?**



A) $f(x) = ||x| + 2| - 2$

B) $f(x) = ||x| - 2| - 2$

C) $f(x) = 2 - |x + 2|$

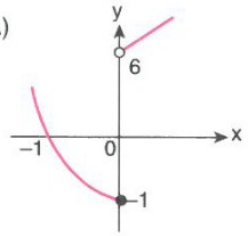
D) $f(x) = |x + 1| - 2$

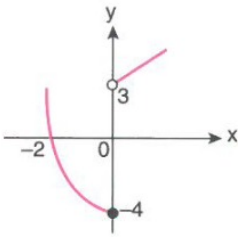
E) $f(x) = |x - 2| - 2$

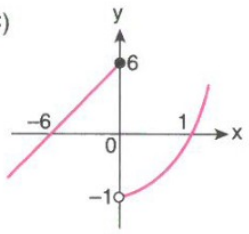
13. $f(x)=\begin{cases} x+3 & , x>0 \\ x^2-4 & , x\le 0 \end{cases}$

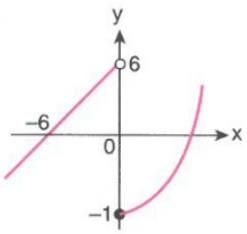
fonksiyonu veriliyor.

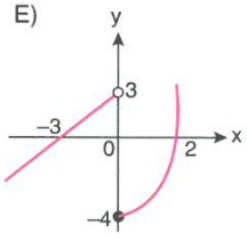
Buna göre, y = f(x) + 3 fonksiyonunun grafiği aşağıdakilerden hangisidir?

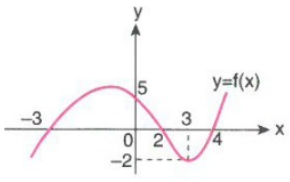
A)


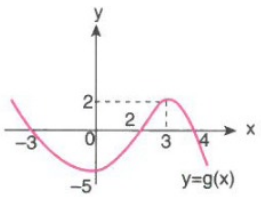
B)


C)


D)


E)


14.




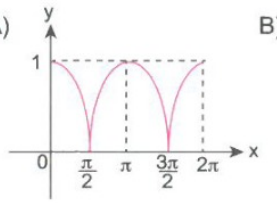
Yukarıda f(x) ve g(x) fonksiyonlarınının grafikleri verilmiştir.

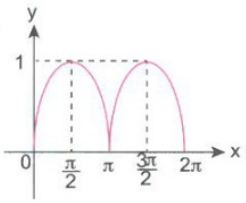
Buna göre, g(x) fonksiyonu aşağıdakilerden hangisine eşittir?

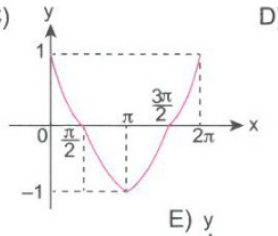
A) $|f(-x)|$ B) $|f(x)|$ C) $-f(-x)$
D) $-f(x)$ E) $f(-x)$

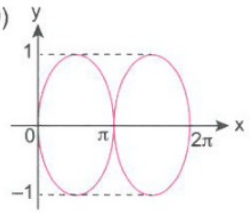
15. $f(x) = |\cos x|$

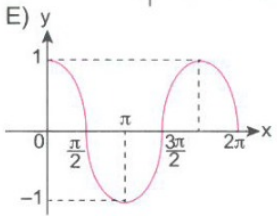
fonksiyonunun [0, 2π] aralığındaki grafiği aşağıdakilerden hangisidir?

A)


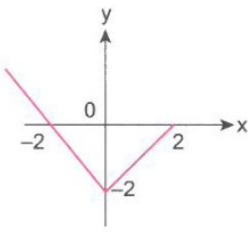
B)


C)


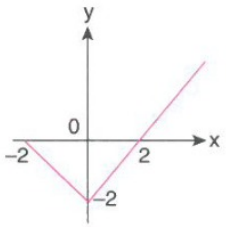
D)


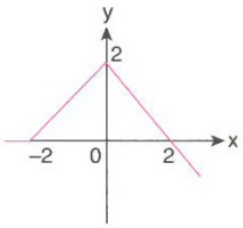
E)


16. Şekilde y = f(x) fonksiyonunun grafiği verilmiştir.



Buna göre, y = –f(–x) fonksiyonunun grafiği aşağıdakilerden hangisidir?

A)


B)


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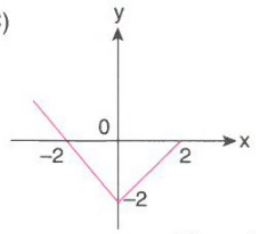
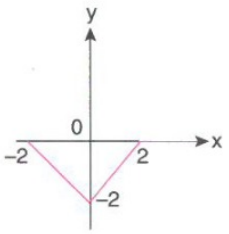
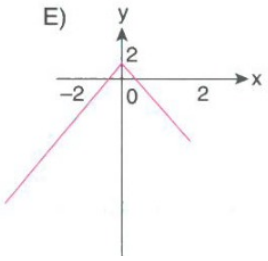
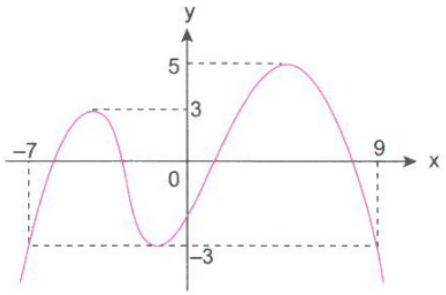


D)


E)


17.



Şekilde y = f(x) fonksiyonunun grafiği verilmiştir.

$$h(x)=\frac{x^2+3}{|f(x)|-2}$$

fonksiyonunu tanımsız yapan kaç farklı x tam sayı değeri vardır?

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