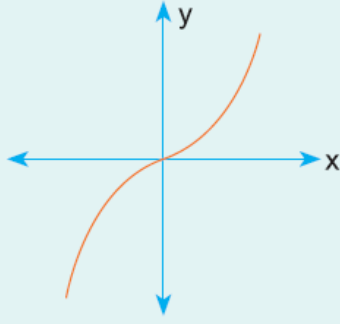


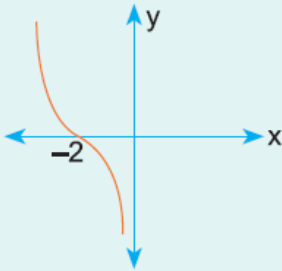
1.



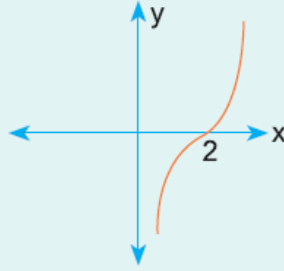
Yukarıda $f(x) = x^3$ fonksiyonunun grafiği verilmiştir.

Buna göre, $y = x^3 - 2$ fonksiyonunun grafiği aşağıdakilerden hangisidir?

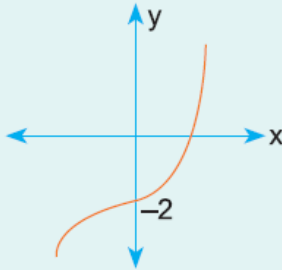
A)



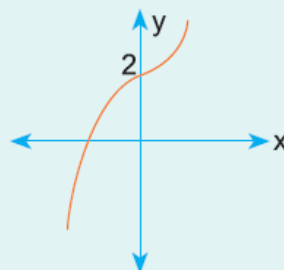
B)



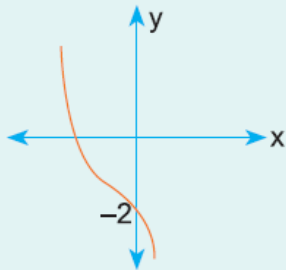
C)



D)



E)

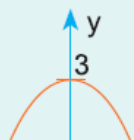


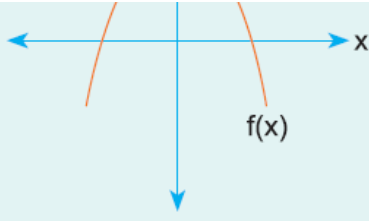
2.

Aşağıda verilen fonksiyonlardan hangilerinin x eksenini kestiği noktalar aynıdır?

- A) $y = f(x)$ ve $y = f(x + 1)$
- B) $y = -f(x)$ ve $y = 2f(x)$
- C) $y = f(x - 1)$ ve $y = f(x + 1)$
- D) $y = f(-x)$ ve $y = -f(x)$
- E) $y = f(x - 2)$ ve $y = f(2x)$

3.

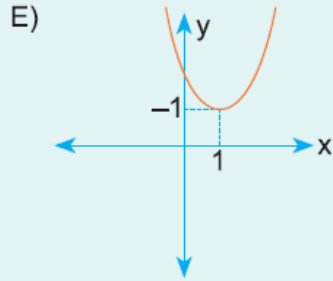
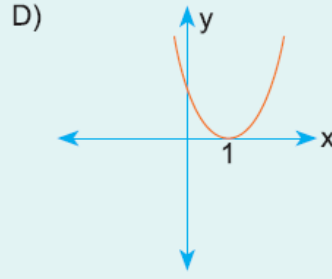
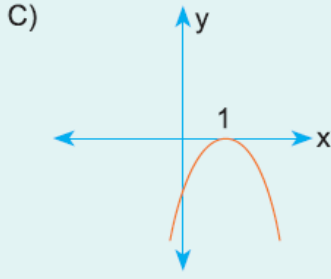
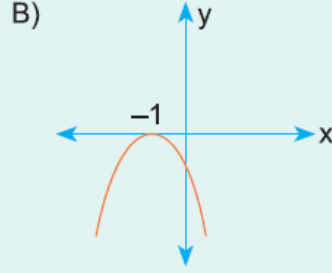
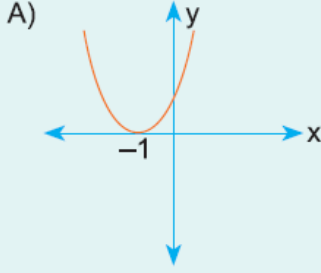




Yukarıda $y = f(x)$ fonksiyonunun grafiği verilmiştir.

$$g(x) = f(x - 1) - 3$$

olduğuna göre, $y = -g(x)$ fonksiyonunun grafiği aşağıdakilerden hangisidir?



4.

$$y = x^2 - 3x + 3$$

fonksiyonunu 3 br sola 2 br aşağı ötelenirse aşağıdaki fonksiyonlardan hangisi oluşur?

- A) $y = x^2 + 3x + 3$
- B) $y = x^2 + 6x - 1$
- C) $y = x^2 - 3x + 1$
- D) $y = x^2 + 3x + 1$
- E) $y = x^2 - 3x - 2$