

5-TRİGONOMETRİK FORMÜLLER

10. Sınıflar aşağıdaki formülleri bilmeli ve soru çözümlerinde kullanabilmelidir.

1) $\boxed{\sin^2 \alpha + \cos^2 \alpha = 1}$

2) $\alpha + \beta = 90^\circ$ için

$$\boxed{\sin \alpha = \cos \beta \quad \sin \beta = \cos \alpha}$$

$$\boxed{\tan \alpha = \cot \beta \quad \tan \beta = \cot \alpha}$$

3) $\alpha < 90^\circ$ için

$$\tan \alpha \cdot \cot \alpha = 1$$

4) $x < 90^\circ$

$$\tan x = \frac{\sin x}{\cos x} \quad \text{ve} \quad \cot x = \frac{\cos x}{\sin x}$$

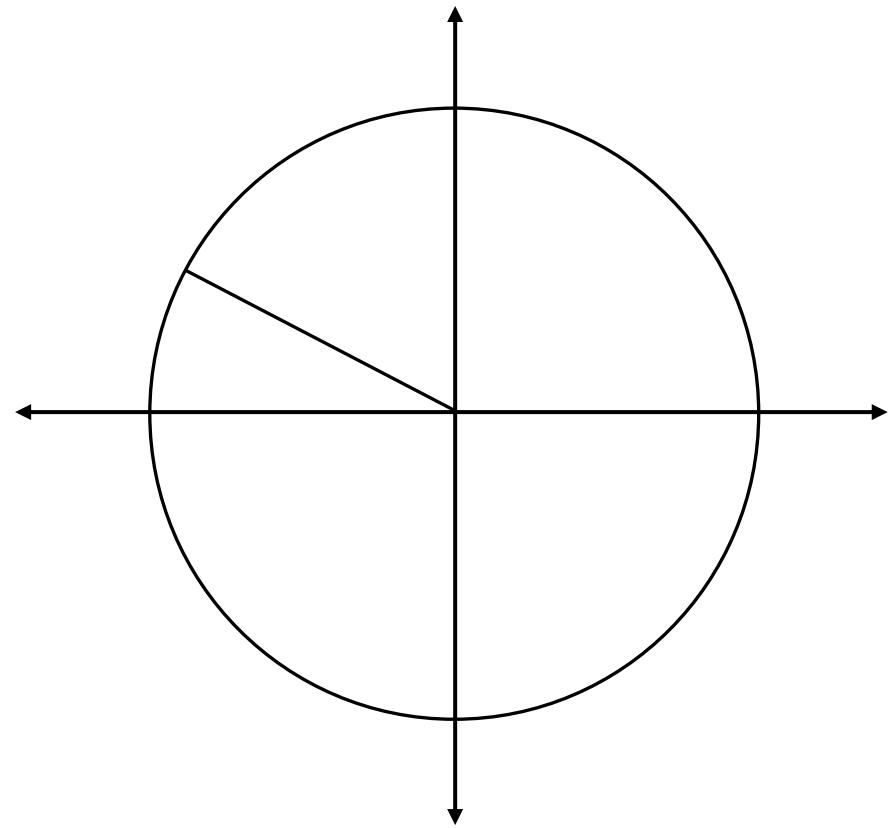
5)

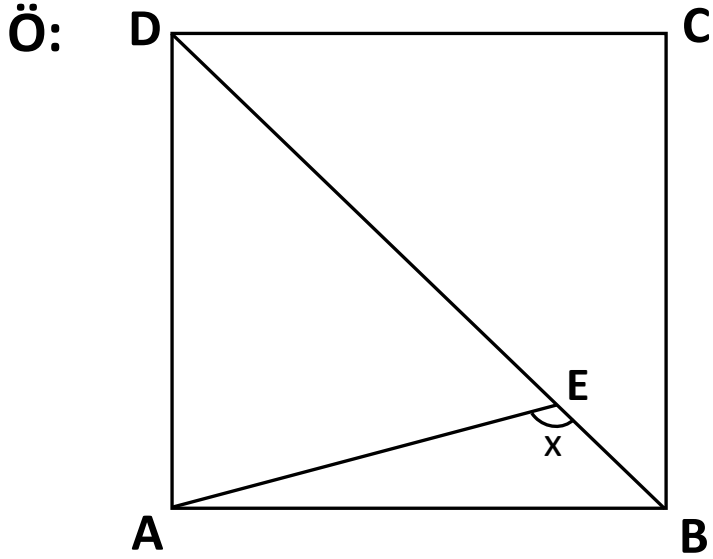
$$\sin(180^\circ - \alpha) = \sin \alpha$$

$$\cos(180^\circ - \alpha) = -\cos \alpha$$

$$\tan(180^\circ - \alpha) = -\tan \alpha$$

$$\cot(180^\circ - \alpha) = -\cot \alpha$$



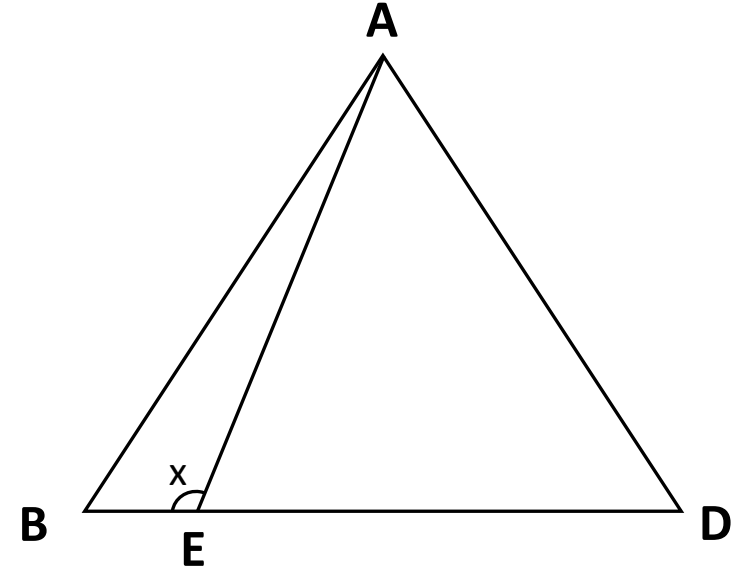


Yukarıdaki şekilde ABCD kare,
[BD] köşegendir.

$$|DE| = 7 \cdot |EB|$$

$$s(AEB) = x \text{ ise } \tan x = ?$$

Ö:



Yukarıdaki şekilde ABC eşkenar üçgen,
 $|DE| = 5 \cdot |EB|$

$$s(AEB) = x \text{ ise } \cot x = ?$$

TRİGONOMETRİK ORANLARIN
BÖLGELERE GÖRE İŞARETLERİ

