## 4 – Tanjant ve Cotanjant Toplam Fark Formülleri :

$$\tan(x+y)=\frac{\tan x+\tan y}{1-\tan x.\tan y}$$

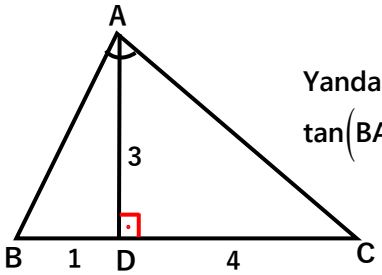
$$\tan(x-y)=\frac{\tan x-\tan y}{1+\tan x.\tan y}$$

$$\cot(x+y)=\frac{\cot x.\cot y-1}{\cot x+\cot y}$$

$$\cot(x-y)=-\frac{\cot x.\cot y+1}{\cot x-\cot y}$$

## Sorular :

1. $\tan x=\frac{3}{2}$ ve $\cot y=2$ ise $\tan(x+y)$ kaça eşittir?

2. 

Yandaki ABC üçgeninde $\tan(BAC)$ kaça eşittir?

3. $\cot 15$ kaça eşittir?

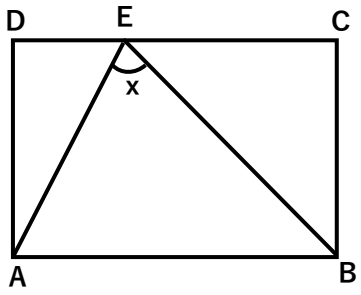
4. $\frac{\tan 40+\tan 5}{1-\tan 40.\tan 5}$ kaça eşittir?

5. $\frac{\tan 80-\cot 70}{\tan 45+\tan 80.\cot 70}$ kaça eşittir?



1. 8 2. 3 3. $\frac{3+\sqrt{3}}{3-\sqrt{3}}$ 4. 1 5. $\sqrt{3}$

**6.**

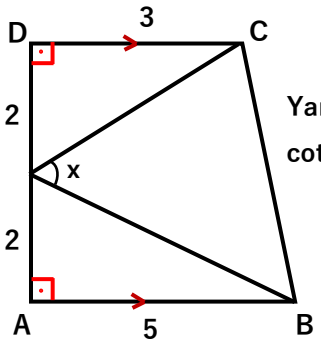



Yandaki ABCD dikdörtgeninde

IECI=2.IDAI=3.IDEI

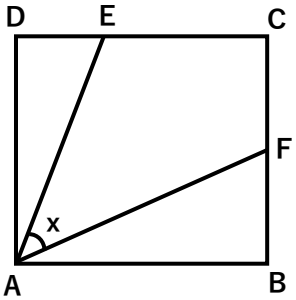
ise tanx kaçtır?

**7.**




Yandaki dik yamukta cotx kaça eşittir?

**8.**



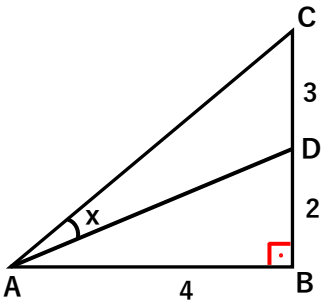

Yandaki ABCD karesinde

IECI=2.IDEI

IBFI=ICFI

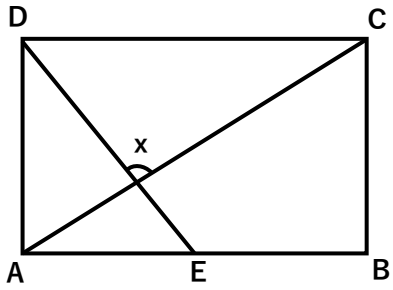
ise tanx kaçtır?

**9.**




Yandaki dik üçgende tanx kaça eşittir?

**10.**



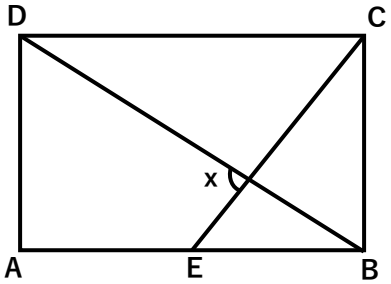

Yandaki ABCD karesinde

3.IAEI=2.IEBI

IEBI=IADI

ise tanx kaçtır?

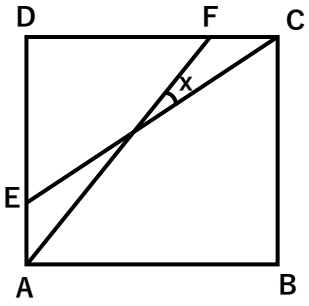
**11.**




Yandaki ABCD dikdörtgeninde

IAEI = IEBI = IBCI

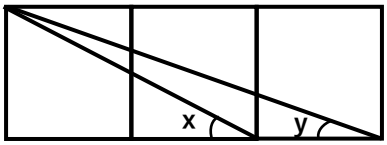
ise tanx kaçtır?

12. 


Yandaki ABCD karesinde

3.|AE|=3.|FC|=|AB|

ise tanx kaçtır?

13. 


Yandaki özdeş karelerden oluşan şekile göre $x + y$ toplamı kaç derecedir?

14. Bir ABC üçgeninde

$\tan A = 4$ $\tan B = 2$ ise $\tan C$ kaçtır?



12. $\frac{5}{12}$ 13. 45° 14. $\frac{6}{7}$