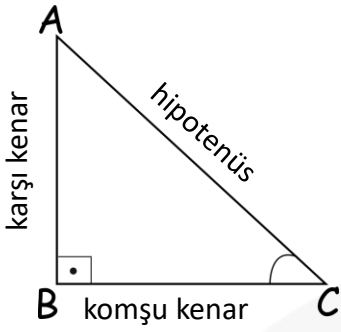


Dik Üçgende Trigonometrik Fonksiyonlar

NELER BİLMELİYİZ



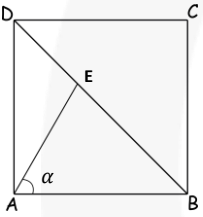
$$\sin \alpha = \frac{\text{karşı kenar}}{\text{hipotenüs}}$$

$$\cos \alpha = \frac{\text{komşu kenar}}{\text{hipotenüs}}$$

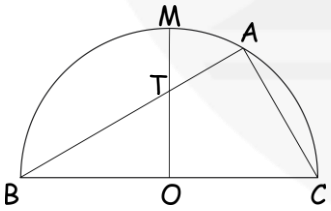
$$\tan \alpha = \frac{\text{karşı kenar}}{\text{komşu kenar}} = \frac{\sin \alpha}{\cos \alpha}$$

$$\cot \alpha = \frac{\text{komşu kenar}}{\text{karşı kenar}} = \frac{\cos \alpha}{\sin \alpha}$$

$$\sec \alpha = \frac{1}{\cos \alpha} \quad \text{cosec } \alpha = \frac{1}{\sin \alpha}$$



ABCD kare
[DB] köşegen ve $m(\widehat{EAB}) = \alpha$
 $\frac{|DE|}{|DB|} = \frac{1}{8}$
olduğuna göre, $\tan \alpha$ kaçtır?



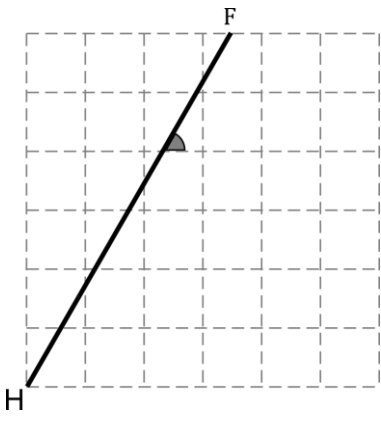
O merkezli yarım çember

$$m(\widehat{ABC}) = \alpha$$

$$|OB| = 2br$$

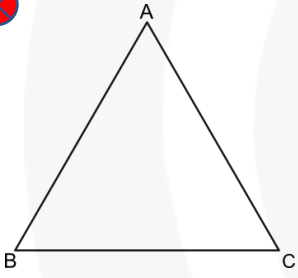
$$[OM] \perp [BC]$$

Verilenlere göre, |AT| uzunluğunun α türünden eşiti nedir?



Yanda birim karelerden oluşan şekilde F noktası bulunduğu birim karenin orta noktasıdır.

Verilenlere göre, $\tan \alpha$ kaçtır?



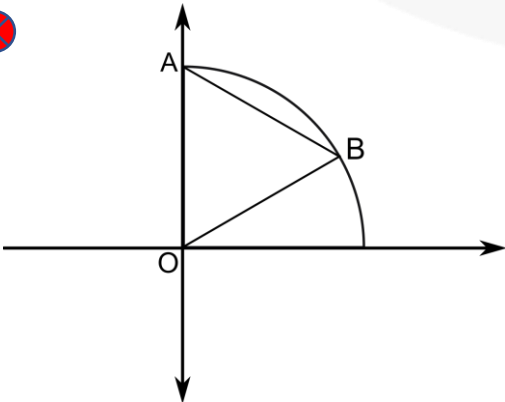
ABC üçgen

$$|AB| = |AC| = 18 \text{ cm ve}$$

$$\widehat{m(ABC)} = \alpha$$

$$\sec \alpha = \frac{9}{5}$$

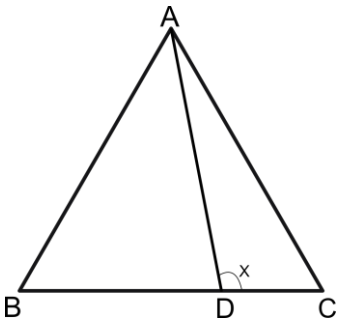
Verilenlere göre, $|BC|$ kaç cm dir?



O merkezli çeyrek birim çemberde
 $|AB| = \sqrt{\cos \alpha}$

$$\widehat{m(AOB)} = \alpha$$

Verilenlere göre, $\tan \alpha$ kaçta eşittir?

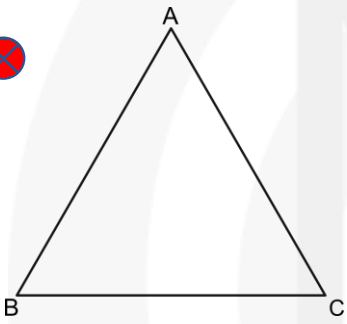


ABC eşkenar üçgen

$$|BD| = 4|DC|$$

$$m(\widehat{ADC}) = \alpha$$

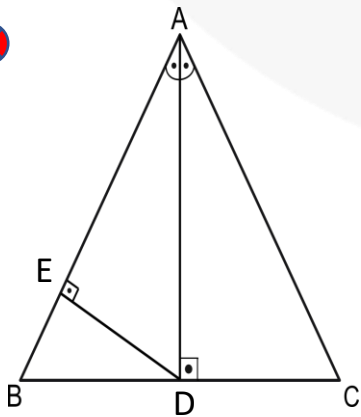
Verilenlere göre, $\cot \alpha$ kaç cm dir?



ABC üçgen

$$|BC| = 16 \text{ br}$$

Verilenlere göre, $\cos \hat{C} \cdot |AC| + \cos \hat{B} \cdot |AB|$ işleminin sonucu kaçtır?



ABC üçgen

[AD] açıortay

$$m(\widehat{ACB}) = \alpha$$

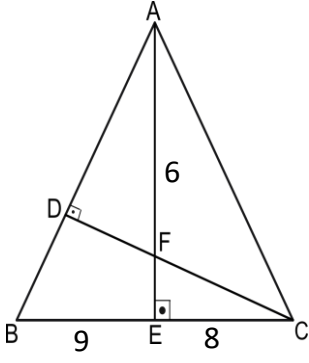
$$DE \perp AB$$

$$AD \perp BC$$

$$|DE| = 4 \text{ cm}$$

$$|DC| = 6 \text{ cm}$$

Verilenlere göre, $\text{cosec } \alpha$ kaç cm dir?



ABC üçgen

$$AE \perp BC$$

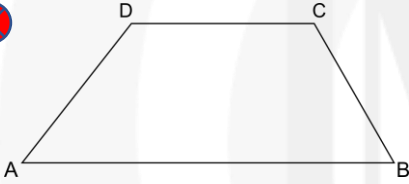
$$CD \perp AB$$

$$|AF| = 6 \text{ cm}$$

$$|BE| = 9 \text{ cm}$$

$$|EC| = 8 \text{ cm}$$

Verilenlere göre, $|EF|$ kaç cm dir?



ABCD yamuk

$$[AB] // [CD]$$

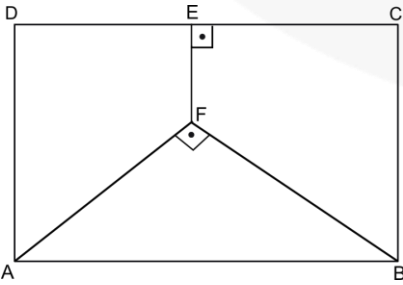
$$m(\widehat{ADC}) + m(\widehat{DCB}) = 270^\circ$$

$$|AD| = 8 \text{ cm}$$

$$|AB| = 29 \text{ cm}$$

$$|DC| = 12 \text{ cm}$$

Verilenlere göre, $\tan(\widehat{BAD})$ kaçtır?



ABCD dikdörtgen

$$AF \perp FB$$

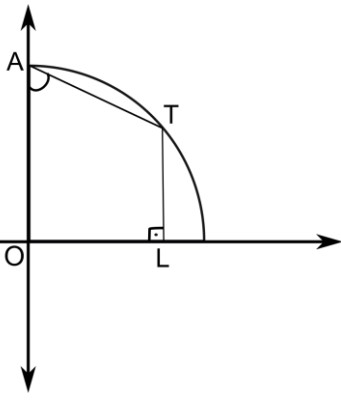
$$EF \perp DC$$

$$m(\widehat{FAD}) = \theta$$

$$|DE| = 9 \text{ cm}$$

$$|EC| = 16 \text{ cm}$$

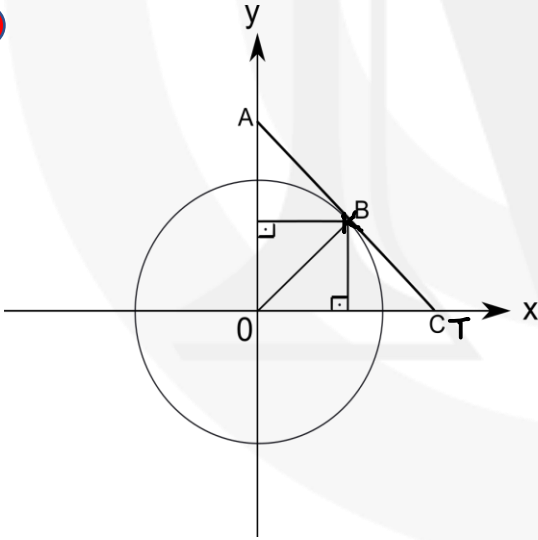
Verilenlere göre, $\sin \theta$ kaç cm dir?



O merkezli çeyrek birim
çemberde

$$m(\widehat{OAT}) = 65^\circ$$

Verilenlere göre, $|TL|$ nin
trigonometrik gösterimini bulunuz.



Yandaki O merkezli yarım birim çember
verilmiştir.

$$[BK] \perp [AO]$$

$$[BT] \perp [CO]$$

B noktası teğet değme noktası ve

$$|AB| + |AC| = \frac{1}{k}$$

$$|BT| + |BK| = p$$

eşitlikleri veriliyor.
Buna göre, p ile k arasındaki ilişkiyi bulalım.