31. ABC bir üçgendir.

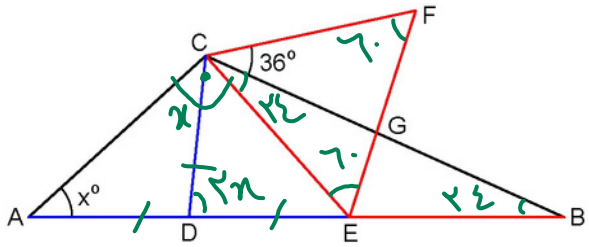
ABC is a triangle.

ABC ist ein Dreieck.

ABC est un triangle.

ABC – треугольник.

ABC مثلث.



$D, E \in [AB]$, $[BC] \cap [EF] = \{G\}$,

$|AD| = |CD| = |DE|$,

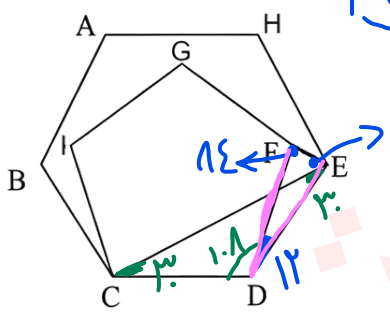
$|BE| = |CE| = |CF| = |EF|$,

$m(\widehat{GCF}) = 36^\circ$, $m(\widehat{BAC}) = x^\circ$

$\Rightarrow x = ?$

A)40 B)42 C)44 D)46 E)48

32.

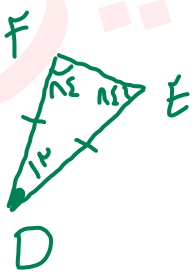


ABCDEH Düzgün altıgen

CDFGI Düzgün beşgen

$\Rightarrow m(C\hat{E}F) = ?$

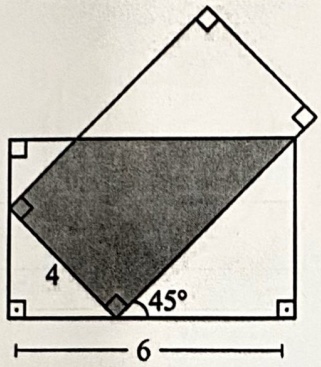
A) 36 B) 42 C) 48 D) 54 E) 72



Diğer sayfaya geçiniz.
Go on to the next page.

* این سوال ایراد علمی دارد و حل نمی شود

33.

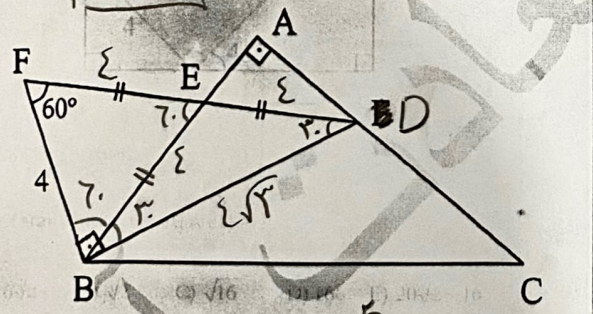


Eş Dikdörtgen

⇒ Taralı Alan (Shaded Area) = ?

A) $6\sqrt{2}$ B) $\sqrt{2}$ C) $\sqrt{16}$ D) 16 E) $20\sqrt{2}-16$

34. متوسط

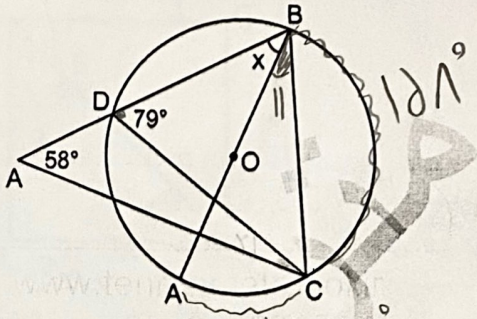


$|AB|=|AC|$

⇒ A(ABC) = ?

A) 12 B) 18 C) 20 D) 24 E) 32

35. متوسط

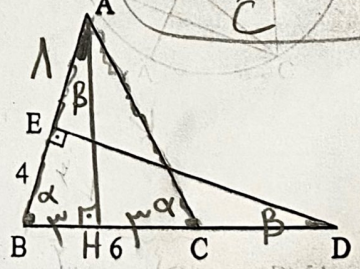


$|AB|=|AC|$

⇒ x = ?

A) 42 B) 48 C) 50 D) 54 E) 58

36. دشوار



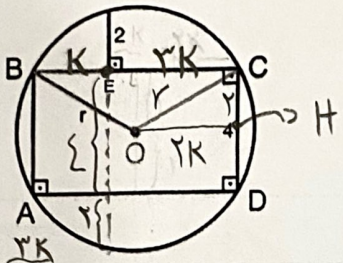
$|AB|=|AC|=12$ ⇒ ABC متساوی الساقین

⇒ $|BD|$ = ?

A) 16 B) 18 C) 20 D) 24 E) 32

Diğer sayfaya geçiniz.
Go on to the next page.

37.



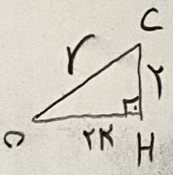
$\Rightarrow r = ?$

A) $2\sqrt{5}$ B) 2 C) $4\sqrt{5}$ D) 4 E) 5

نقطه E محل برخورد دو وتر از دایره O

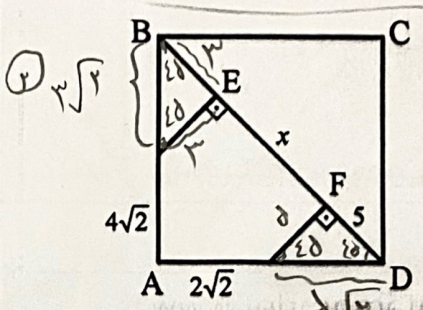
$K \times 3K = 2 \times 6 \Rightarrow 3K^2 = 12 \Rightarrow K^2 = 4 \Rightarrow$

$K = 2$



$\Rightarrow r = \sqrt{4+16} = 2\sqrt{5}$

38.



ABCD Kare

$\Rightarrow x = ?$

A) 12 B) 8 C) 7 D) 6 E) 4

زاویه بین قطر و ضلع مربع ۴۵ است

متوسط

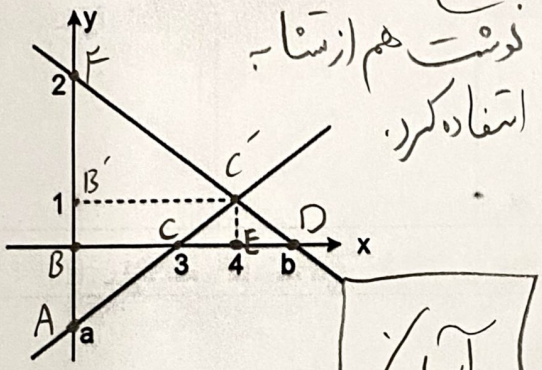
مساحت مربع = ضلع $\times \sqrt{2} \Rightarrow$

$3 + x + 5 = (7\sqrt{2}) \times \sqrt{2} \Rightarrow$

$x + 8 = 14 \Rightarrow x = 6$

Diğer sayfaya geçiniz.
Go on to the next page.

39. توان سوال هم مشبه معادله‌ی خطها رو نوشت هم از تشابه استفاده کرد.



آسان

$\Rightarrow a+b=?$

A) 3 B) 5 C) 7 D) 9 E) 11

$\triangle AB'C' \sim \triangle ABC \Rightarrow$

$\frac{|a|}{|a|+1} = \frac{3}{4} \Rightarrow 4|a| = 3|a| + 3$

$\Rightarrow |a| = 3 \overset{a<0}{\Rightarrow} a = -3$

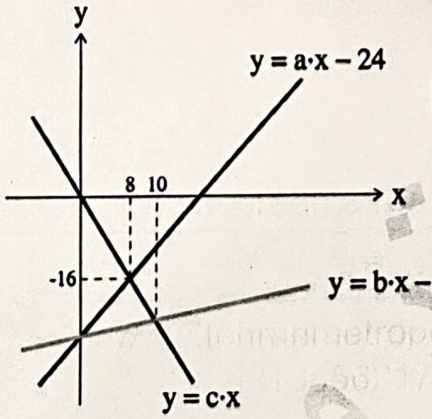
$\triangle DC'E \sim \triangle DFB \Rightarrow$

$\frac{b-4}{b} = \frac{1}{2} \Rightarrow 2b - 8 = b \Rightarrow$

$b = 8$

$\Rightarrow a+b = -3+8 = 5$

40.



آسان

$\Rightarrow a+b+c=?$

A) 3 B) 1 C) $-\frac{3}{5}$ D) $-\frac{1}{5}$ E) -1

$y = ax - 24 \overset{x=8}{\underset{y=-16}{\Rightarrow}} -16 = 8a - 24$

$\Rightarrow a = 1$

$y = cx \overset{x=8}{\underset{y=-16}{\Rightarrow}} -16 = 8c \Rightarrow$

$c = -2$

دو خط $y=-2x$ و $y=bx-24$ هردو از نقطه به مختصات $x=10$ عبور می‌کنند.

$y = -2x \overset{x=10}{\Rightarrow} y = -20$

حالا در $y=bx-24$

$-20 = 10b - 24 \Rightarrow$

$b = \frac{4}{10} = \frac{2}{5}$

$a+b+c = 1 + \frac{2}{5} - 2 = -\frac{3}{5}$

Diğer sayfaya geçiniz.
Go on to the next page.