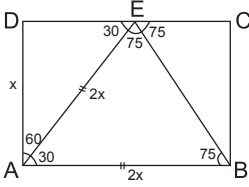


1.



$$[DC] \parallel [AB] \Rightarrow m(\widehat{CEB}) = m(\widehat{EBA}) = 75^\circ$$

$$|EA| = 2x \text{ ise } |AB| = 2x, |AD| = x \text{ dir.}$$

$$\text{Ç} (ABCD) = 4x + 2x$$

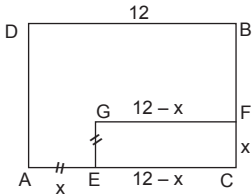
$$6x = 12$$

$$x = 2 \text{ dir.}$$

$$A (ABCD) = 2 \cdot 4 = 8 \text{ cm}^2 \text{ dir.}$$

CEVAP: C

2.



$$|GE| = x \text{ ise } |EC| = 12 - x$$

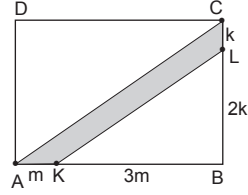
$$\text{Ç} (EBGF) = 2 \cdot (12 - x) + 2 \cdot x$$

$$= 24 - 2x + 2x$$

$$= 24 \text{ cm dir.}$$

CEVAP: D

3.



$$|AB| = 4 \cdot |AK| \Rightarrow |AK| = m, |KB| = 3m$$

$$|BC| = 3 \cdot |LC| \Rightarrow |LC| = k, |BL| = 2k$$

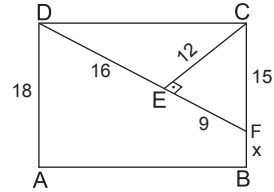
$$A (ABCD) = 240$$

$$m \cdot k = 20$$

$$\begin{aligned} A (AKLC) &= \frac{3k \cdot 4m}{2} - \frac{2k \cdot 3m}{2} \\ &= \frac{12 \cdot 20}{2} - \frac{6 \cdot 20}{2} \\ &= 120 - 60 = 60 \text{ cm}^2 \end{aligned}$$

CEVAP: B

4.



$$\text{CDF dik üçgeninde } 12^2 = 16 \cdot |EF|$$

$$144 = 16 \cdot |EF|$$

$$|EF| = 9$$

$$\text{CEF dik üçgeninde pisagor bağıntısından,}$$

$$|CF|^2 = 12^2 + 9^2$$

$$|CF| = \sqrt{144 + 81}$$

$$|CF| = 15 \text{ cm dir.}$$

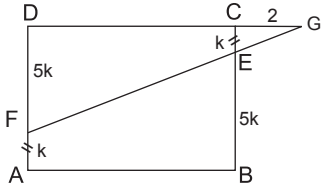
$$\text{Buna göre, } 15 + x = 18$$

$$x = 3 \text{ cm dir.}$$

CEVAP: C



5.



$$|FA| = |CE| = \frac{|EB|}{5} \Rightarrow |FA| = |CE| = k$$

$$|EB| = 5k$$

$\triangle GCE \sim \triangle GDF$ olduğu için

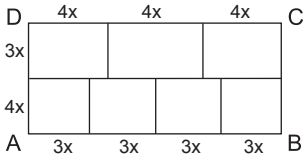
$$\frac{2}{2 + |CD|} = \frac{k}{5k} \Rightarrow 10 = 2 + |CD|$$

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

$|AB| = |CD| = 8 \text{ cm}$ dir.

CEVAP: D

6.



Şekildeki dikdörtgenlerin kısa kenarları $3x$ alınırsa uzun kenarları $4x$ olur.

$$\begin{aligned} \text{Ç}(\text{ABCD}) &= 2 \cdot 12x + 2 \cdot 7x \\ &= 24x + 14x \\ &= 38x \end{aligned}$$

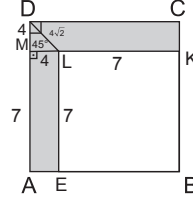
$$38x = 114$$

$$x = 3$$

$$\begin{aligned} A(\text{ABCD}) &= (12x) \cdot (7x) \\ &= 36 \cdot 21 \\ &= 756 \text{ cm}^2 \text{ dir.} \end{aligned}$$

CEVAP: D

7.



$[LM] \perp [AD]$ çizilirse

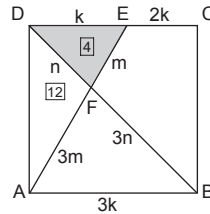
$|DM| = |ML| = 4 \text{ cm}$ olur.

BELK kare olduğu için $|LK| = |LE| = 7 \text{ cm}$

$$\begin{aligned} \text{Taralı Alan} &= 7 \cdot 4 + \frac{4 \cdot 4}{2} + 7 \cdot 4 + \frac{4 \cdot 4}{2} \\ &= 28 + 8 + 28 + 8 \\ &= 72 \text{ cm}^2 \text{ dir.} \end{aligned}$$

CEVAP: A

8.



$|DC| = 3 \cdot |DE|$ olduğu için $|DE| = k$ ise $|DC| = 3k$ olur.

$|DC| = |AB| = 3k$

$$\triangle DEF \sim \triangle BAF \Rightarrow \frac{|DE|}{|AB|} = \frac{|EF|}{|FA|} = \frac{k}{3k}$$

$$\frac{A(\triangle DEF)}{A(\triangle FAB)} = \frac{m}{3m} \Rightarrow \frac{4}{A(\triangle FAB)} = \frac{1}{3} \Rightarrow A(\triangle FAB) = 12 \text{ cm}^2$$

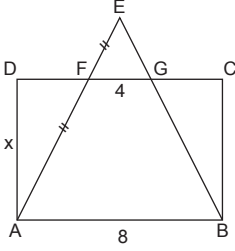
$$\frac{A(\triangle DAF)}{A(\triangle FAB)} = \frac{1}{3} \Rightarrow \frac{12}{A(\triangle FAB)} = \frac{1}{3} \Rightarrow A(\triangle FAB) = 36 \text{ cm}^2$$

$$A(\text{ABCD}) = 48 \cdot 2 = 96 \text{ cm}^2$$

CEVAP: E



9.



Dikdörtgenin karşılıklı kenarları paraleldir.

EAB üçgeninde $[FG] \parallel [AB]$ ve $|EF| = |FA|$ ve $[FG]$ orta taban olduğundan $|AB| = 8$ cm olur.

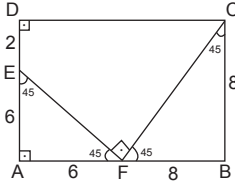
$$A(ABCD) = |AD| \cdot |AB|$$

$$96 = x \cdot 8$$

$$x = 12 \text{ cm dir.}$$

CEVAP: C

10.



$m(\widehat{FCB}) = 45$ ise $m(\widehat{CFB}) = m(\widehat{EFA}) = m(\widehat{AEF}) = 45$ olur.

Buna göre,

$$|BC| = |FB| = 8 \text{ cm}$$

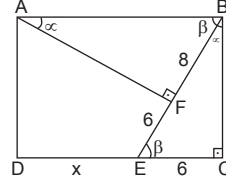
$$|CB| = |AD| \Rightarrow |AE| = 8 - 2 = 6 \text{ cm}$$

$$|EA| = |AF| = 6 \text{ cm olduğu için}$$

$$|CD| = 8 + 6 = 14 \text{ cm dir.}$$

CEVAP: B

11.



BAF ile FBA ve CEB ile EBC tümler açılarıdır. Buradan

$\widehat{AFB} \sim \widehat{BCE}$ olur.

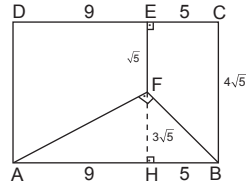
$$\frac{|FB|}{|CE|} = \frac{|AB|}{|BE|} \Rightarrow \frac{8}{6} = \frac{|AB|}{14}$$

$$\Rightarrow |AB| = \frac{56}{3} \text{ cm olur.}$$

$$x + 6 = \frac{56}{3} \Rightarrow x = \frac{38}{3} \text{ cm dir.}$$

CEVAP: C

12.



$[FH] \perp [AB]$ çizilirse $|HB| = 5$ cm $|AH| = 9$ cm olur.

AFB dik üçgeninde oklid bağıntısından

$$|FH|^2 = 9 \cdot 5 \rightarrow |FH| = 3\sqrt{5} \text{ dir.}$$

Buna göre,

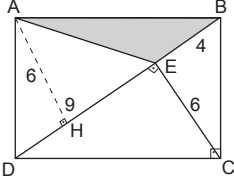
$$A(ABCD) = 14 \cdot 4\sqrt{5}$$

$$= 56\sqrt{5} \text{ cm dir.}$$

CEVAP: D



13.



BDC üçgeninde öklid bağıntısından $6^2 = 9 \cdot |BE| = 4$ cm olur.

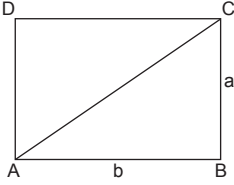
[AH] \perp [BD] çizersek, BAD ile BCD eş üçgenler olduğundan,

|CE| = |AH| = 6 cm olur.

$$A(\triangle ABE) = \frac{4 \cdot 6}{2} = 12 \text{ cm}^2 \text{ dir}$$

CEVAP: B

14.



$$A(ABCD) = a \cdot b$$

$$32 = a \cdot b$$

ABC dik üçgeninden

$$a^2 + b^2 = (4\sqrt{5})^2 \Rightarrow a^2 + b^2 = 80$$

$$a^2 + b^2 = (a + b)^2 - 2ab \text{ den}$$

$$80 = (a + b)^2 - 2 \cdot 32$$

$$144 = (a + b)^2 \Rightarrow a + b = 12$$

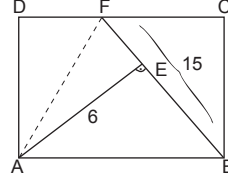
$$\Ç(ABCD) = 2 \cdot (a + b)$$

$$= 2 \cdot (12)$$

$$= 24 \text{ cm dir.}$$

CEVAP: D

15.



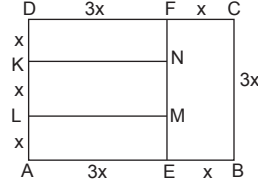
F ile A noktasını birleştirdiğimizde FAB üçgeninin alanı dikdörtgenin alanının yarısına eşittir.

$$A(\triangle FAB) = \frac{15 \cdot 6}{2} = 45 \text{ cm}^2$$

$$A(ABCD) = 45 \cdot 2 = 90 \text{ cm}^2 \text{ dir.}$$

CEVAP: D

16.



Dikdörtgenler eş olduğu için kısa kenarı x ise, uzun kenarı 3x olur.

$$\Ç(ABCD) = 2 \cdot (4x + 3x)$$

$$70 = 2 \cdot (7x)$$

$$x = 5$$

$$A(ABCD) = 20 \cdot 15$$

$$= 300 \text{ cm}^2 \text{ dir.}$$

CEVAP: C

