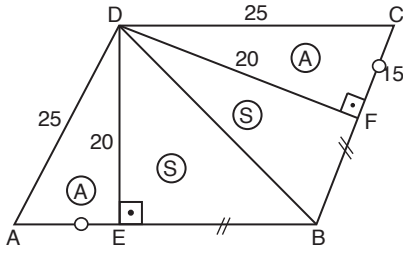


1.



$|BD|$ köşegen

$A(\widehat{ADE}) = A(\widehat{DCF})$ olduğundan

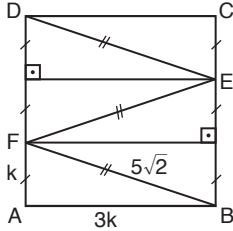
$|DE| = |DF| = 20$ birimdir.

\widehat{ADE} ve \widehat{DCF} 15 – 20 – 25 özel üçgenidir.

$\text{Ç}(ABCD) = 4 \cdot 25 = 100$

Cevap: C

2.



FAB üçgeninde Pisagor'dan

$$k^2 + (3k)^2 = (5\sqrt{2})^2$$

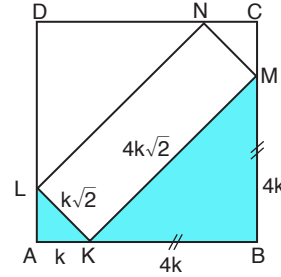
$$10k^2 = 50$$

$$k^2 = 5$$

$$A(ABCD) = (3k)^2 = 9k^2 = 9 \cdot 5 = 45$$

Cevap: B

3.



$$2(k\sqrt{2} + 4k\sqrt{2}) = 20$$

$$10k\sqrt{2} = 20$$

$$k\sqrt{2} = 2$$

$$k = \frac{2}{\sqrt{2}}$$

$$k = \sqrt{2}$$

Taralı Alan = $A(\widehat{LAK}) + A(\widehat{KBM})$

$$= \frac{k^2}{2} + \frac{(4k)^2}{2}$$

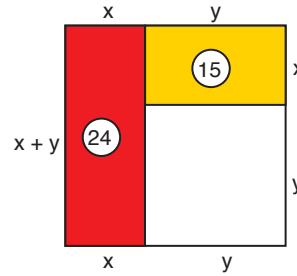
$$= \frac{17k^2}{2}$$

$$= \frac{17(\sqrt{2})^2}{2}$$

$$= 17$$

Cevap: E

4.



$$x \cdot y = 15$$

$$x(x+y) = 24$$

$$x^2 + xy = 24$$

$$x^2 + 15 = 24$$

$$x^2 = 9$$

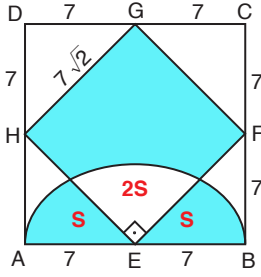
$$x = 3$$

$$y = 5$$

$$\begin{aligned} \text{Küçük karenin alanı} &= y^2 = 5^2 \\ &= 25 \end{aligned}$$

Cevap: A

5.

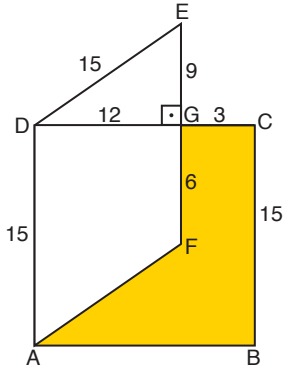


Alan taşıma yapılırsa;

$$\text{Boyalı Alan} = (7\sqrt{2})^2 = 98$$

Cevap: E

6.

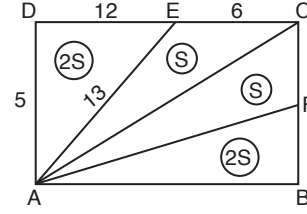


- $|DA|$ kenarı kare ile eşkenar dörtgenin ortak kenarı olduğundan eşkenar dörtgenin bir kenar uzunluğu 15 birimdir.
- DEG üçgeni 9 – 12 – 15 özel üçgenidir.
- GFAD bir dik yamuktur.
- Taralı Alan = $A(ABCD) - A(GFAD)$

$$\begin{aligned} &= 15^2 - \left(\frac{6+15}{2}\right) \cdot 12 \\ &= 225 - 126 \\ &= 99 \end{aligned}$$

Cevap: B

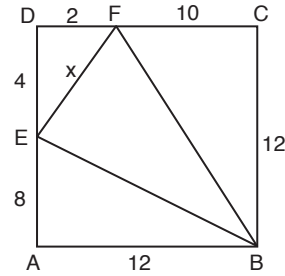
7.



- $|AC|$ köşegeni dikdörtgenin alanını iki eşit parçaya böler.
- ACD üçgeninde $|EC| = 6$ kenarına düşen alan S ve $|DE|$ kenarına düşen alan 2s olduğundan $|DE| = 12$ birimdir.
- ADE üçgeni 5 – 12 – 13 özel üçgenidir.
- ABCD dikdörtgeninin çevresi
 $2(5 + 18) = 2 \cdot 23 = 46$

Cevap: C

8.



$$\begin{aligned} A(ABCD) &= 60 + 36 + 48 \\ &= 144 \text{ olduğundan} \\ \text{ABCD karesinin kenar uzunluğu} \\ \sqrt{144} &= 12 \text{ birimdir.} \end{aligned}$$

$$A(\widehat{BCF}) = \frac{|FC| \cdot 12}{2} = 60$$

$$|FC| = 10$$

$$|DF| = 2$$

$$A(\widehat{EAB}) = \frac{|EA| \cdot 12}{2} = 48$$

$$|EA| = 8$$

$$|DE| = 4$$

FDE üçgeninde Pisagordan

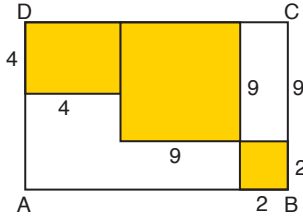
$$x^2 = 2^2 + 4^2$$

$$x^2 = 20$$

$$x = 2\sqrt{5}$$

Cevap: B

9.



$$4 \cdot 4 + 9 \cdot 9 + 2 \cdot 2 = 16 + 81 + 4 \\ = 101$$

Cevap: A

$$11. \quad m(\widehat{DEC}) + 60 + 90 + 108 = 360$$

$$m(\widehat{DEC}) + 258 = 360$$

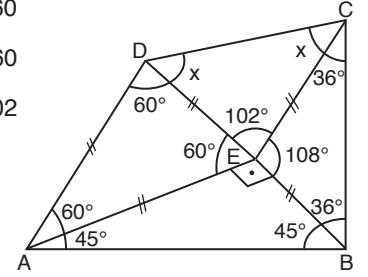
$$m(\widehat{DEC}) = 102$$

DEC üçgeninden;

$$x + 102 + x = 180$$

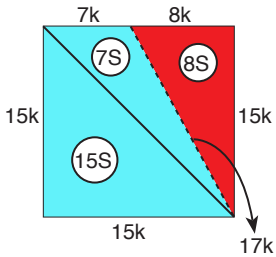
$$2x = 78$$

$$x = 39$$



Cevap: A

10.



$$\frac{\text{Alan}_{\text{kırmızı}}}{\text{Alan}_{\text{mavi}}} = \frac{4}{11} = \frac{8}{22}$$

$$\text{Kartonun Alanı} = 8S + 22S \\ = 30S$$

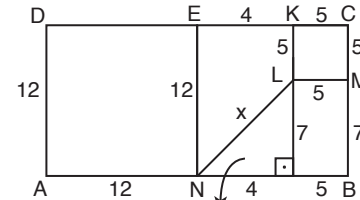
$$\frac{\text{Çevre}_{\text{kırmızı}}}{\text{Çevre}_{\text{mavi}}} = \frac{8k + 15k + 17k}{7k + 15k + 15k + 17k}$$

$$= \frac{40k}{54k}$$

$$= \frac{20}{27}$$

Cevap: C

12.



$$x^2 = 4^2 + 7^2$$

$$x^2 = 16 + 49$$

$$x^2 = 65$$

$$x = \sqrt{65}$$

Cevap: D