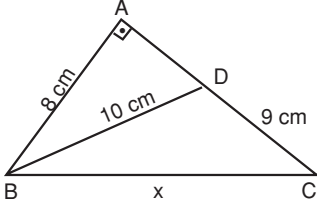


1.



\widehat{ABD} 'ninde;

$IADI = 6$ bulunur. (3 – 4 – 5 dik üçgeni)

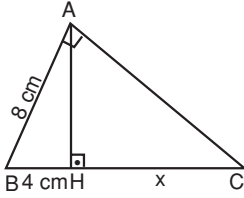
$$\Rightarrow x^2 = IABI^2 + IACI^2$$

$$\Rightarrow x^2 = 8^2 + 15^2$$

$$\Rightarrow x = 17$$

Cevap: D

2.



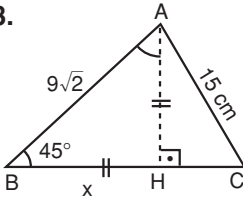
Öklid kuralına göre;

$$8^2 = 4 \cdot (4 + x)$$

$$64 = 4 \cdot (4 + x) \Rightarrow x = 12$$

Cevap: C

3.



$[AH] \perp [BC]$

($[AH]$ çizilir.)

$I BHI = I AHI = 9$ (90 – 45 – 45 üçgeni)

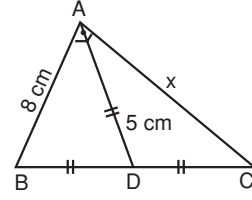
$$I AHI^2 + I HCI^2 = 15^2 \Rightarrow 9^2 + I HCI^2 = 15^2$$

$$\Rightarrow I HCI = 12 \text{ olur.}$$

$$\Rightarrow I BCI = I BHI + I HCI = 9 + 12 = 21$$

Cevap: D

4.

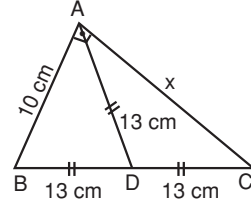


$I BDI = I DCI = I ADI = 5$ (muhteşem üçlü)

$I ACI = x = 6$ (6 – 8 – 10 dik üçgeni)

Cevap: A

5.



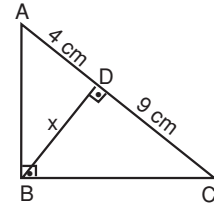
$I BDI = I DCI = I ADI = 13$ (muhteşem üçlü)

$$x^2 + 10^2 = 26^2$$

$$\Rightarrow x = 24$$

Cevap: C

6.



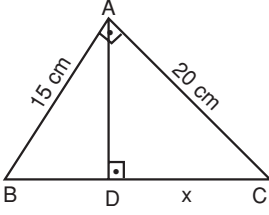
Öklid kuralına göre;

$$x^2 = 4 \cdot 9 = 36$$

$$x = 6$$

Cevap: C

7.



$$\frac{1}{IADI^2} = \frac{1}{15^2} + \frac{1}{20^2}$$

$$\frac{1}{IADI^2} = \frac{20^2 + 15^2}{15^2 \cdot 20^2} \Rightarrow IADI^2 = \frac{15^2 \cdot 10^2}{625}$$

$$IADI = \frac{15^3 \cdot 20^4}{25^5} = 12 \text{ bulunur.}$$

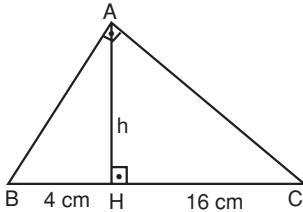
\widehat{ADC} 'ninde;

$$IADI^2 + x^2 = 20^2 \Rightarrow 12^2 + x^2 = 20^2$$

$$x = 16$$

Cevap: D

8.

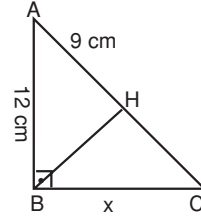


Öklid kuralına göre;

$$h^2 = 4 \cdot 16 = 64 \Rightarrow h = 8$$

Cevap: A

9.



Öklid kuralına göre;

$$12^2 = 9 \cdot (9 + IHCI) \Rightarrow IHCI = 7$$

\widehat{ABH} 'ninde;

$$12^2 = 9^2 + IBHI^2$$

$$\Rightarrow IBHI^2 = 63$$

\widehat{BHC} 'ninde;

$$IBHI^2 + IHCI^2 = x^2$$

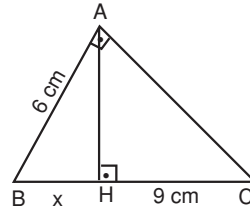
$$63 + 7^2 = x^2$$

$$\Rightarrow x^2 = 112$$

$$\Rightarrow x = 4\sqrt{7}$$

Cevap: C

10.



Öklid kuralına göre;

$$6^2 = x \cdot (x + 9)$$

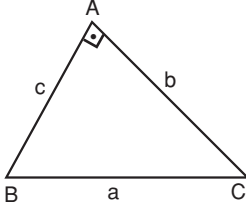
$$36 = x \cdot (x + 9) \Rightarrow \boxed{x = 3}$$

$$\downarrow$$

$$3$$

Cevap: B

11.



$$b^2 + c^2 = a^2 \text{ 'dır. (Pisagor)}$$

$$a^2 + \underbrace{b^2 + c^2}_{a^2} = 288$$

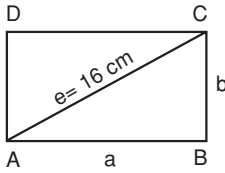
$$a^2 + a^2 = 288 \Rightarrow 2a^2 = 288$$

$$\Rightarrow a^2 = 144$$

$$a = 12$$

Cevap: C

12.



$$\text{Dikdörtgenin alanı} = a \cdot b = 160 \text{ cm}^2$$

$$a^2 + b^2 = e^2 = 16^2$$

$$a^2 + b^2 = 16^2 = (a + b)^2 - 2ab$$

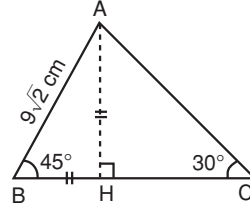
$$\Rightarrow 16^2 = (a + b)^2 - 2 \cdot 160$$

$$\Rightarrow 576 = (a + b)^2$$

$$\Rightarrow a + b = 24$$

Cevap: A

13.



$$[AH] \perp [BC] \quad ([AH] \text{ çizilir.})$$

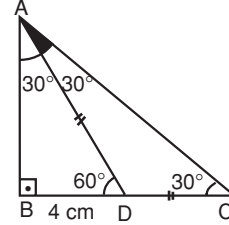
$$|AH| = |BH| = 9 \quad (90 - 45 - 45)$$

\widehat{AHC} 'ninde;

$$|AC| = 2 \cdot |AH| = 2 \cdot 9 = 18 \quad (90 - 30 - 60)$$

Cevap: B

14.



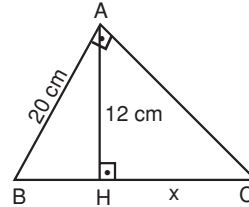
\widehat{ABD} 'ninde;

$$|AD| = 8 \text{ olur.} \quad (90 - 30 - 60)$$

$$|AD| = |DC|$$

Cevap: C

15.



$$|BH|^2 + 12^2 = 20^2$$

$$\Rightarrow |BH| = 16$$

Öklid kuralına göre;

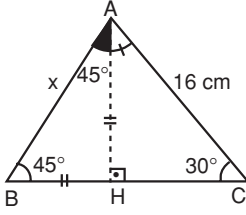
$$20^2 = |BH| \cdot (|BH| + |HC|)$$

$$20^2 = 16 \cdot (16 + x)$$

$$400 = 16 \cdot (16 + x) \Rightarrow x = 9$$

Cevap: D

16.



$[AH] \perp [BC]$ ($[AH]$ çizilir.)

\widehat{AHC} 'ninde;

$$|AH| = \frac{16}{2} = 8 \text{ olur. } (90 - 30 - 60)$$

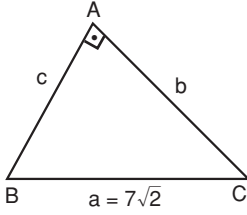
\widehat{ABH} 'ninde;

$$x = (|AH| = |BH|) \cdot \sqrt{2} \quad (90 - 45 - 45)$$

$$x = 8\sqrt{2}$$

Cevap: B

17.



$$a^2 = (7\sqrt{2})^2 = b^2 + c^2$$

$$b^2 + c^2 = 98$$

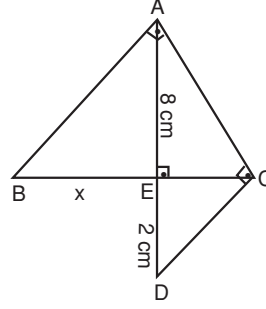
$$\Rightarrow (b + c)^2 - 2bc = 98$$

$$\Rightarrow (b + c)^2 - 2 \cdot 23 = 98$$

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

Cevap: C

18.



\widehat{ADC} 'ninde;

Öklit kuralına göre;

$$|CE|^2 = 2 \cdot 8 = 16 \Rightarrow |CE| = 4$$

\widehat{ABC} 'ninde;

Öklit kuralına göre;

$$8^2 = x \cdot |CE| = x \cdot 4$$

$$64 = x \cdot 4 \Rightarrow x = 16$$

Cevap: A