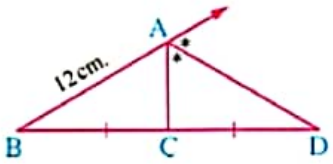
(20) In the opposite figure :

AC = ... cm.

(a) 3 (b) 4 (c) 6 (d) 8

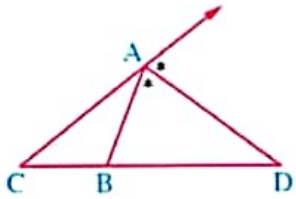


(21) In the opposite figure :

If AB : AC = 2 : 3

, then BD : BC = ...

(a) 2 : 1 (b) $\frac{3}{2}$ (c) $\frac{2}{3}$ (d) $\frac{1}{2}$

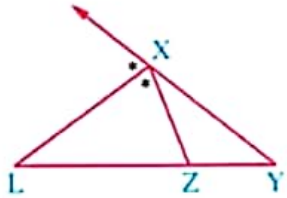


(22) In the opposite figure :

$\overrightarrow{XL}$ bisects the exterior angle X , then $\frac{YL}{YX}$ = ...

(a) $\frac{YZ}{ZL}$ (b) $\frac{YL}{LZ}$

(c) $\frac{LZ}{ZX}$ (d) $\frac{XZ}{XY}$

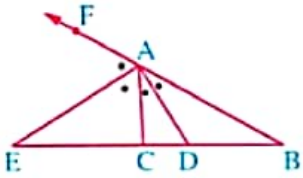


(23) By using the opposite figure :

All the following statements are true except .....

(a) $\frac{BA}{AC} = \frac{BD}{DC}$ (b) $\frac{BA}{AC} = \frac{BE}{EC}$

(c) $\frac{CA}{AB} = \frac{DA}{AE}$ (d) $\angle$ DAE is a right angle

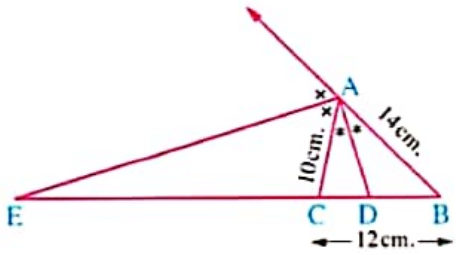


(24) In the opposite figure :

DE = ... cm.

(a) 12 (b) 24

(c) 30 (d) 35

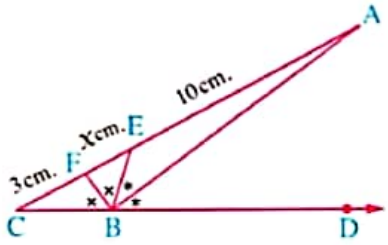


(25) In the opposite figure :

$\mathcal{X}$ = ... cm.

(a) 1 (b) 2

(c) 3 (d) 4

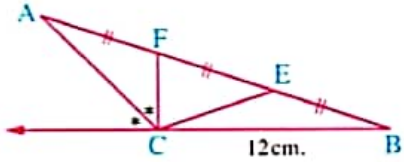


(26) In the opposite figure :

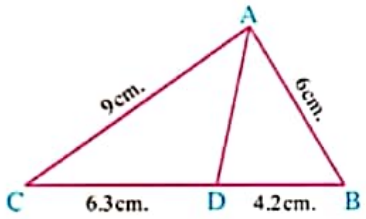
CF = ... cm.

(a) 3 (b) 4

(c) 5 (d) 6



(4) In the opposite figure :



which of the following statements is true ?

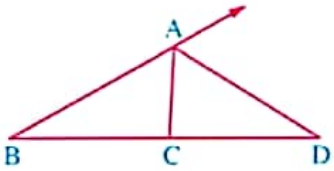
(a) $\Delta BAD \sim \Delta BCA$

(b) $AB \times AC = BD \times DC$

(c) $m(\angle BAD) = m(\angle CAD)$

(d) $AD = \sqrt{BD \times DC - AB \times AC}$

(5) In the opposite figure :

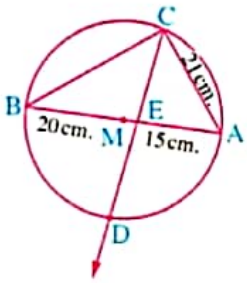


Which of the following conditions is sufficient to prove that $\overrightarrow{AD}$ bisects the exterior angle at the vertex A ?

(a) $\frac{AD}{AC} = \frac{DB}{BC}$ (b) $\frac{AB}{AC} = \frac{BD}{BC}$

(c) $\frac{AB}{AC} = \frac{CD}{BD}$ (d) $AB \times DC = AC \times DB$

(6) In the opposite figure :

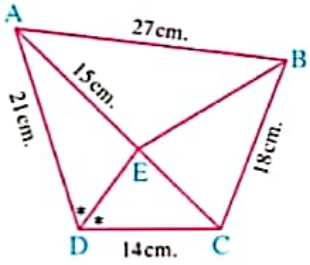


Circle M in which , $\overline{AB}$ is a diameter , $E \in \overline{AB}$, if AE = 15 cm. , BE = 20 cm. , AC = 21 cm. , $\overline{CE}$ intersect circle M at D , then $m(\widehat{AD})$ = ...°

(a) 45 (b) 90

(c) 22.5 (d) 60

(7) In the opposite figure :

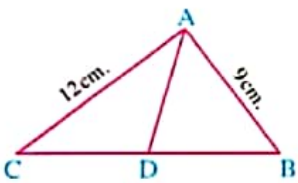


which of the following statements is false ?

(a) CE = 10 cm. (b) $\overrightarrow{BE}$ bisects $\angle ABC$

(c) $BE = 4\sqrt{21}$ cm. (d) $DE = 12\sqrt{2}$ cm.

(8) In the opposite figure :



If a $(\Delta ABD) = 30$ cm^2 , a $(\Delta ACD) = 40$ cm^2 , then $\overrightarrow{AD}$ is .....

(a) perpendicular to $\overline{BC}$ (b) bisects $\angle BAC$

(c) passes through the midpoint of $\overline{BC}$ (d) All the previous