



وزارة التربية والتعليم

الإدارة المركزية لتطوير المناهج

إدارة تنمية مادة الرياضيات

أداءات ونقيمات لمنهج الرياضيات

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للعام الدراسى 2024 / 2025

الرياضيات



Class Performance (14)

➤ Answer the following questions:

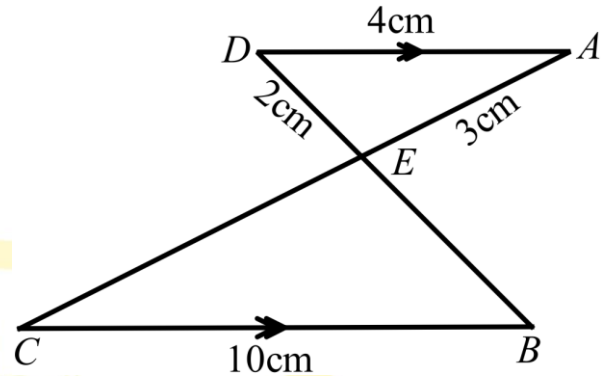
1) In the opposite figure:

$\overline{AD} \parallel \overline{BC}$, $AD = 4\text{ cm}$, $BC = 10\text{ cm}$,

$AE = 3\text{ cm}$, $ED = 2\text{ cm}$.

a) Prove that: $\triangle AED \sim \triangle CEB$

b) Find: The perimeter of $\triangle CEB$



2) In the opposite figure:

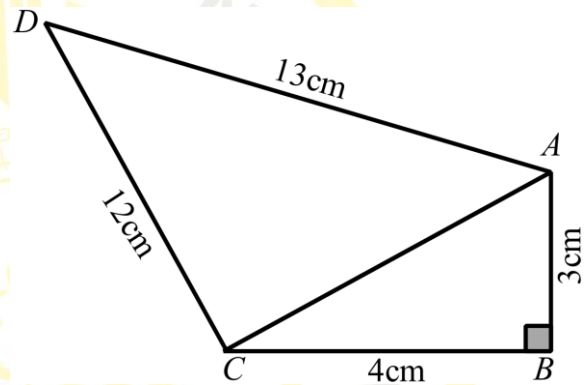
ABC is a triangle in which:

$m(\angle B) = 90^\circ$, $AB = 3\text{ cm}$, $BC = 4\text{ cm}$,

$AD = 13\text{ cm}$, $CD = 12\text{ cm}$.

Prove that:

$m(\angle ACD) = 90^\circ$



3) In the opposite figure:

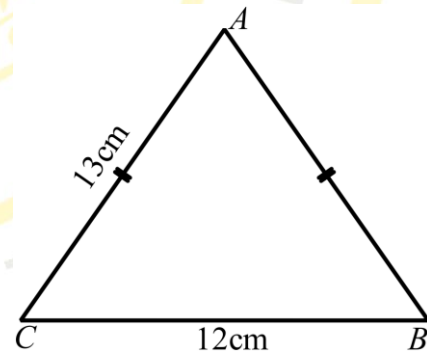
ABC is a triangle in which:

$AB = AC = 13\text{ cm}$,

And $BC = 12\text{ cm}$.

Find:

The length of the projection of $\overline{AC}$ on $\overline{BC}$



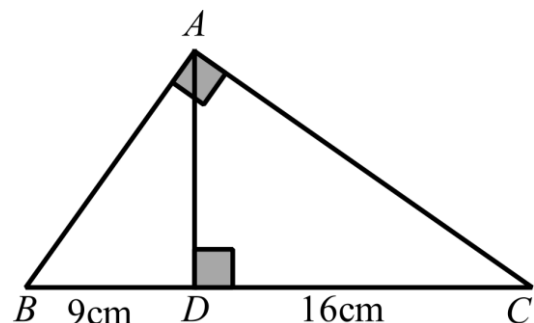
4) In the opposite figure:

ABC is a right angled triangle at A

$\overline{AD} \perp \overline{BC}$, $DC = 16\text{ cm}$, $DB = 9\text{ cm}$.

Find:

The length of $\overline{AD}$





5) In the opposite figure:

Determine the type of the triangle ABC

according to its angles if:

$AB = 24$ cm, $BC = 25$ cm, $AC = 7$ cm.

- 6) If x is the probability of the impossible event and y is the probability of the certain event, find the value of $3^x + 2^y$
- 7) If the probability that a player will score a goal is 0.7, find the probability that he will not score a goal.
- 8) A class has 36 pupils, if the probability of choosing a boy is 0.6, find the number of girls.
- 9) A bag has 10 cards numbered from 1 to 10, if a card is drawn randomly, find the probability that the card carries an even number.
- 10) A box contains some identical balls, 8 of them are white, 4 balls are green and 12 balls are red, one ball is drawn randomly, find the probability of the drawn ball is:
- a) White.
 - b) Green.
 - c) Red.
 - d) Non white.