وزارة التربية والتعليم

الإدارة المركزية لتطوير المناهج

إدارة تنمية مادة الرياضيات

أداءات وتقييمات لمنهج الرياضيات

للصف الثانى الأعدادي

للعام الدراسي 2024 / 2025

وزارة التربية والتعليم
الإدارة المركزية لتطوير المناهج
مكتب مستشار الرياضيات

Class performance (12)

➢ **Answer the following questions:**

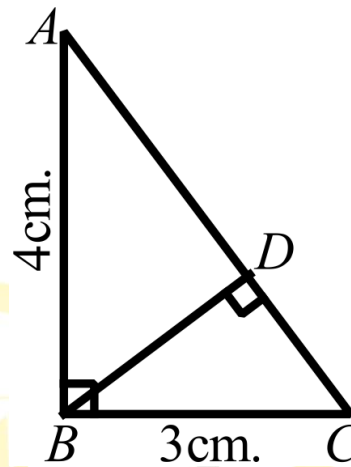**1) In the opposite figure:**

ABC is a triangle in which:

$m (\angle ABC) = 90°$, and $D \in \overline{AC}$

Such that $\overline{BD} \perp \overline{AC}$,

$AB = 4\ cm$, BC = 3 cm.

Find:

a) The length of $\overline{AC}$

b) The length of BD

2) In the opposite figure:

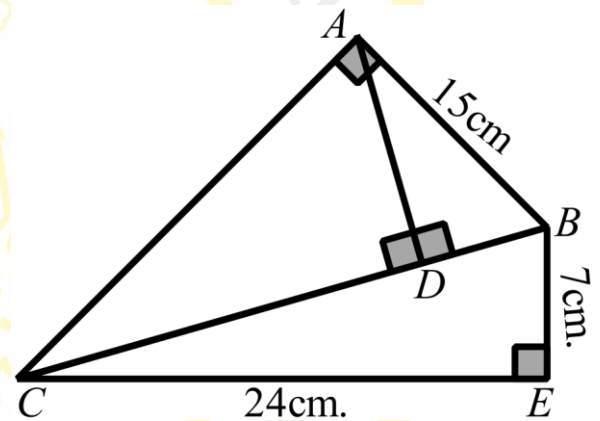$m (\angle BAC) = m (\angle BEC) = 90°$

$\overline{AD} \perp \overline{BC}$,

AB = 15 cm, BE = 7 cm, and EC = 24 cm.

Find:

a) The length of $\overline{BC}$

b) The length of $\overline{AC}$
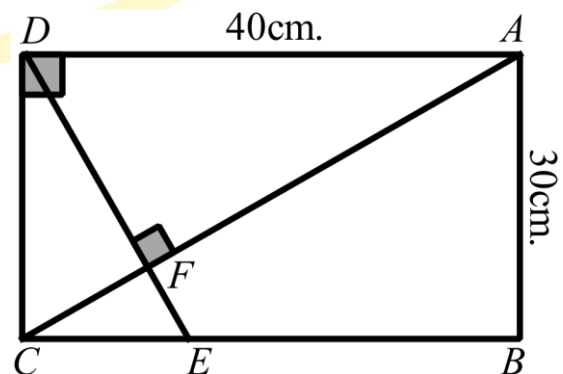
c) The length of $\overline{AD}$

3) In the opposite figure:

ABCD is a rectangle in which:

AB = 30 cm, AD = 40 cm, $\overline{DE} \perp \overline{AC}$

Intersects $\overline{AC}$ at F and intersects $\overline{BC}$ at E

Find:

a) The length of $\overline{AF}$

b) The length of $\overline{DF}$

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Second Year Preparatory Second Term 2024 – 2025
Algebra: Probability
Geometry: Exercises on Euclidean theorem

وزارة التربية والتعليم
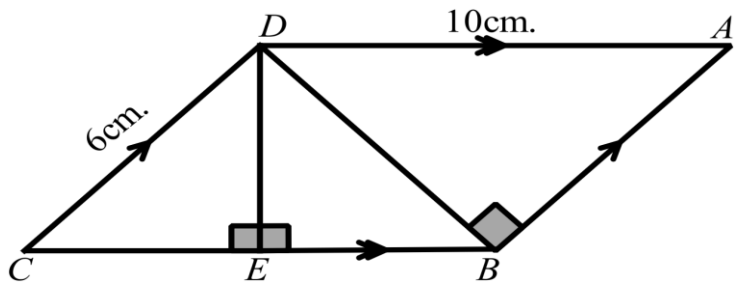الإدارة المركزية لتطوير المناهج
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4) In the opposite figure:

ABCD is a parallelogram,

$\overline{AB} \parallel \overline{CD}, \overline{AD} \parallel \overline{BC}$

AD = 10 cm, CD = 6 cm,

$m(\angle ABD) = m(\angle DEB) = 90°$

Find:

a) The length of $\overline{BD}$

b) The length of $\overline{BE}$

c) The length of $\overline{DE}$

5) In the opposite figure:

ABC is a triangle in which: $m(\angle B) = 90°$

$\overline{BE} \perp \overline{AD}$ where $D \in \overline{BC}, E \in \overline{AD}$

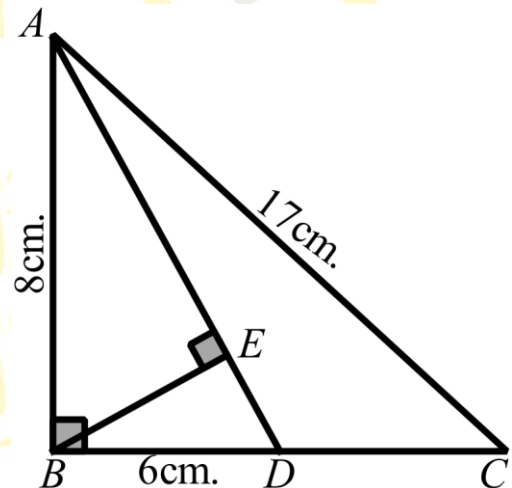$AB = 8\ cm, BD = 6\ cm$ and $AC = 17\ cm$.

Find:

a) The length of $\overline{AD}$

b) The length of $\overline{BE}$

c) The length of $\overline{DC}$

6) Find the probability of the impossible event.

7) Find the probability of randomly selecting the digit 5 from the number 532532

8) A bag contains 12 white balls, 4 green balls, and 8 red balls, one ball is drawn randomly. Find the probability of the drawn ball is:

  a) White   b) Green   c) Red   d) Non white

9) The probability of the success of a student in mathematics is 0.8, find the probability of his failure.

10) A box has 9 identical cards numbered from 1 to 9, if a card is drawn randomly, then find the probability of the drawn card carries a prime number.