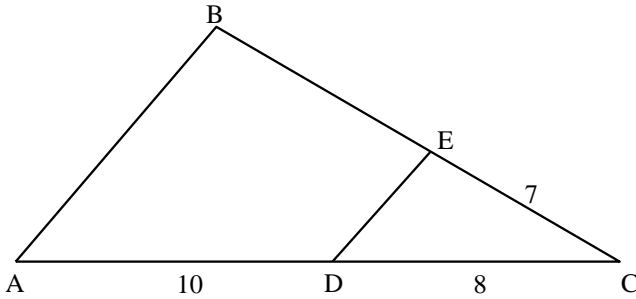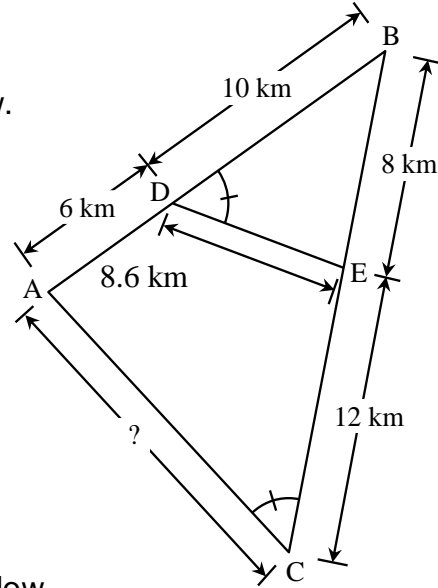# SIMILAR TRIANGLES-MISSING MEASURES WKSHT

1. In triangle ABC below, segment DE is parallel to segment AB. The measurements are given in metres. **What is the length of segment BC?**
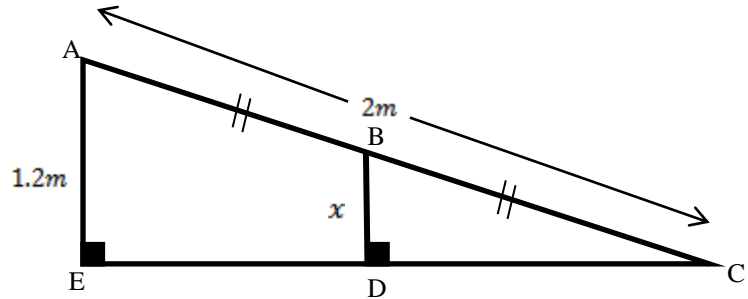


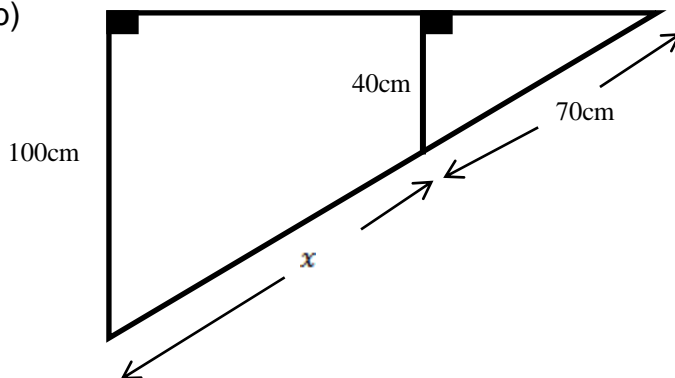2. Determine the length of side $\overline{AC}$ in the figure below.



3. Determine the length of $x$ in each of the figures below.

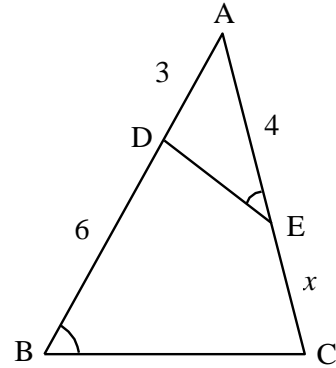   a)  $\overline{AB} \cong \overline{BC}$



   b)

4. In triangles ABC and AED shown on the right, ∠AED ≅ ∠ABC.
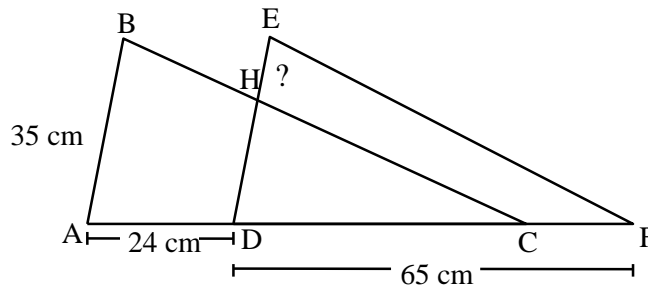
   m $\overline{AD}$ = 3 cm,

   m $\overline{DB}$ = 6 cm,

   m $\overline{AE}$ = 4 cm.

   **What is the measure of $\overline{EC}$ ?**

5. In the figure below, triangles ABC and DEF are congruent. Triangle ABC and DHC are similar.

   35 cm

   24 cm

   65 cm

   **What is the measure of $\overline{EH}$ , rounded to the nearest unit?**

6. In the figure on the right,

   ∠GAC ≅ ∠EBD,    ∠ACG ≅ ∠BDE,

   m $\overline{AB}$ = 5 cm,    m $\overline{BC}$ = 10 cm,

   m $\overline{CD}$ = 10 cm,    m $\overline{AG}$ = 12 cm,

   m $\overline{DE}$ = 10 cm.

   **What is the perimeter of triangle BCF?**
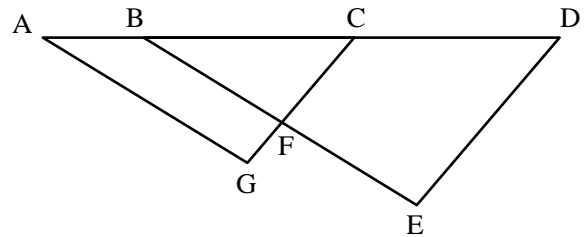
7. Triangles ABC and DAE, shown below, are similar.

   32°

   28°

   34°

   **What is the measure of angle DAF?**