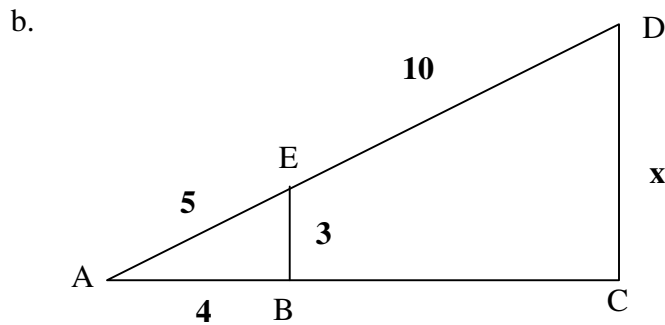
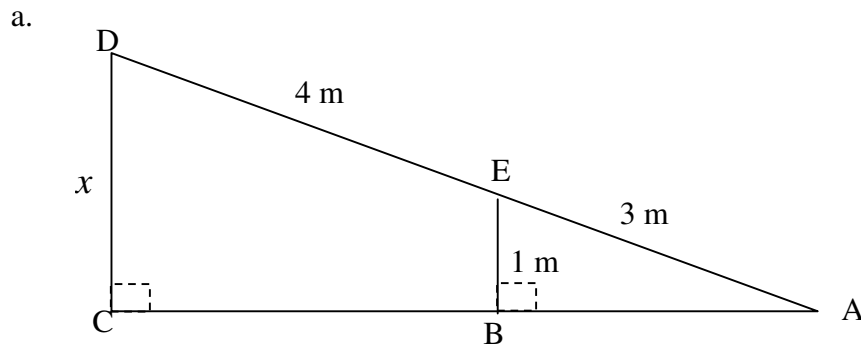


\*Show work and draw diagrams where necessary

1. Solve for  $x$ :



2. The length of a shadow of a monument is  $26\text{ m}$ , when the length of Sonia's shadow is  $7.8\text{ m}$ . If Sonia is  $1.5\text{ m}$  tall, calculate the height of the monument.

3. On a steep section of a train route, the railway rises  $5\text{ m}$  for every  $200\text{ m}$  of track length. Through what height does the train rise in traveling  $10\text{ m}$  along the track?

4. Shandra said that two triangles drawn on a page “looked” similar. How can she find out for sure if they are or are not similar?

5. Given one triangle, magnify the lengths of the sides by a scale factor of 2. How do the measures of the angles of this enlarged triangle compare with the angles of the original triangle?