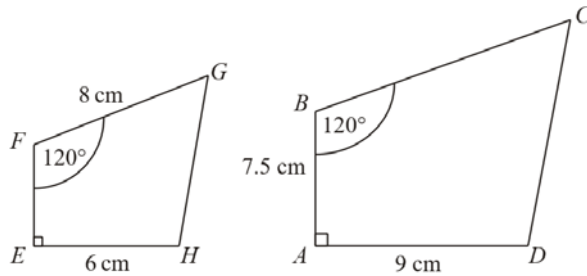
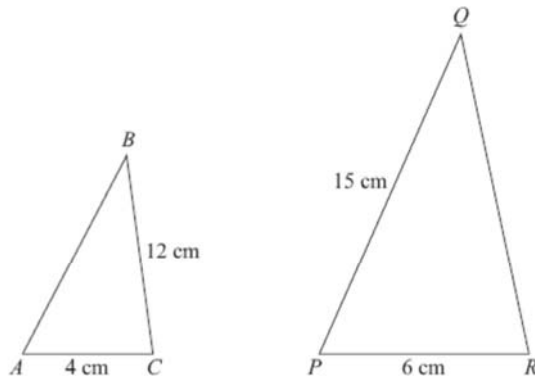


1. Shapes $ABCD$ and $EFGH$ are mathematically similar.



- (a) Calculate the length of BC .
- (b) Calculate the length of EF .

2.

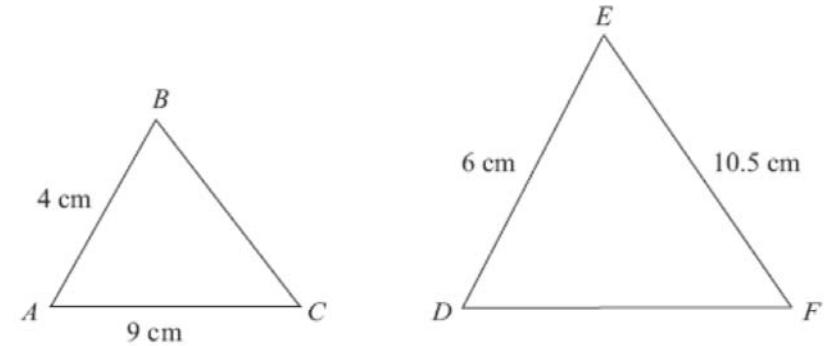


Triangles ABC and PQR are mathematically similar.

Angle A = angle P .
 Angle B = angle Q .
 Angle C = angle R .
 AC = 4 cm.
 BC = 12 cm.
 PR = 6 cm.
 PQ = 15 cm.

- (a) Work out the length of QR .
- (b) Work out the length of AB .

3.

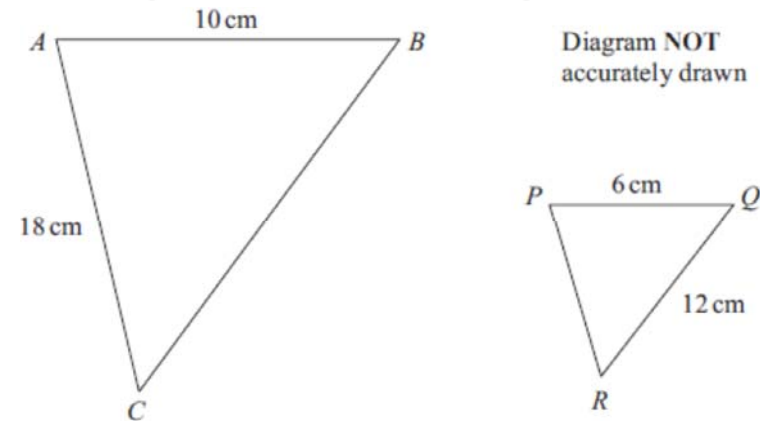


Triangles ABC and DEF are similar.

AB = 4 cm.
 AC = 9 cm.
 DE = 6 cm.
 EF = 10.5 cm.

- (a) Work out the length of DF .
- (b) Work out the length of BC .

4. The diagram shows two similar triangles.

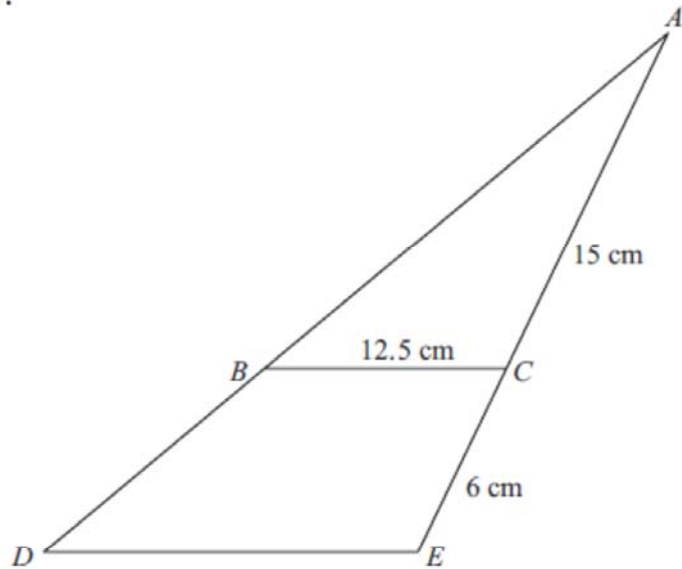


In triangle ABC , AB = 10 cm and AC = 18 cm.
 In triangle PQR , PQ = 6 cm and QR = 12 cm.

Angle ABC = angle PQR .
 Angle CAB = angle RPQ .

- (a) Calculate the length of BC .
- (b) Calculate the length of PR .

5.



Triangle ABC is similar to triangle ADE .

$AC = 15$ cm.

$CE = 6$ cm.

$BC = 12.5$ cm.

Work out the length of DE .

*6.



A 20 Euro note is a rectangle 133 mm long and 72 mm wide.

A 500 Euro Note is a rectangle 165 mm long and 82 mm wide.

Show that the two rectangles are not mathematically similar.