Topic Test 1 (20 minutes)
Congruence and similarity - Foundation

1 A photograph measures 10 cm by 18 cm

1 (a) The photograph is enlarged by a scale factor of 1.5

Work out the new dimensions.

[2 marks]

Answer _____ cm by _____ cm

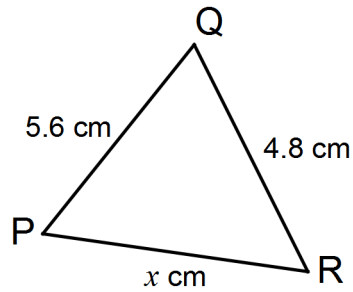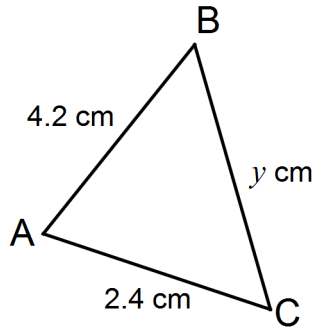**1 (b)** Another enlargement of the photograph is made.

The shorter side has length 7.5 cm

Work out the longer side.

[2 marks]

Answer _____ cm

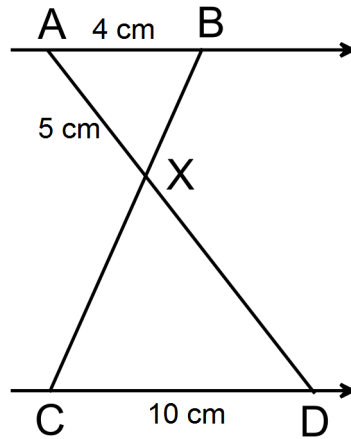**2** Triangle *ABC* is similar to triangle *PQR*.

B

4.2 cm

y cm

A

2.4 cm

C

Q

5.6 cm

4.8 cm

P

x cm

R

Not drawn
accurately

Work out the values of x and y.

[3 marks]

$x =$ _____ cm

$y =$ _____ cm

3   AB and CD are parallel lines.

AD and BC meet at X.

A   4 cm   B

5 cm

X

Not drawn
accurately

C   10 cm   D

3 (a)   Show that triangles ABX and DCX are similar.

[3 marks]

_____
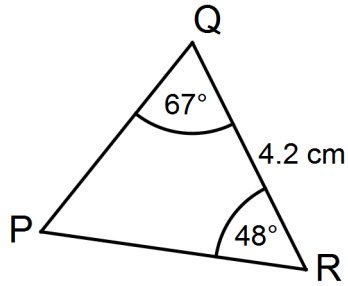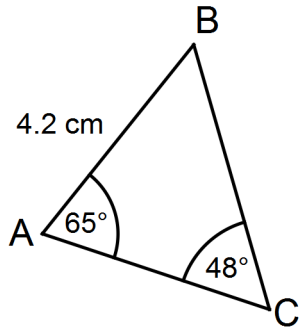
_____

_____

_____

3 (b)   Work out the length of XD.

[2 marks]

_____

_____

Answer _____ cm

4   Are triangles ABC and PQR similar, congruent or neither?

Justify your answer.

B

4.2 cm

A 65°

48°

C

Q

67°

4.2 cm

P 48°

R

Not drawn accurately

[3 marks]

Answer _____