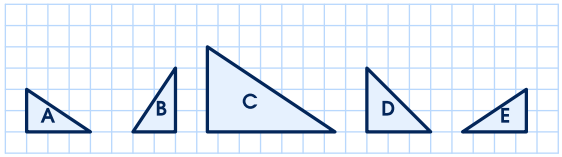
GCSE FOUNDATION · REVISION MAT 1

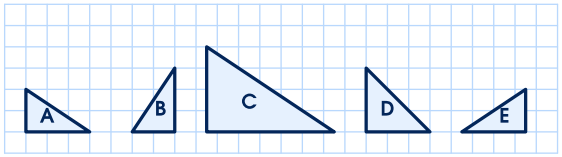
Congruent and similar shapes

1 Here are some shapes on a grid.



Which shapes are congruent to shape A?

2 Here are some shapes on a grid.

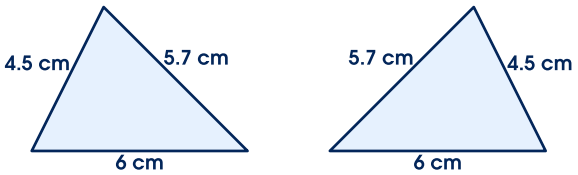


Which shape is similar to shape A but not congruent to it?

3 Two triangles both have angles 50°, 60° and 70°.
One has a shortest side of 4 cm, the other 6 cm.

Explain why the triangles are similar but not congruent.

4 Here are two triangles.



Explain why the two triangles are congruent.
Give the condition you use.

5 Triangles PQR and XYZ are similar.
PQR has sides 4, 5, 6 cm.

The shortest side of XYZ is 6 cm.

Work out the lengths of the other two sides of XYZ.

6 Rectangle A is 4 cm by 10 cm.

Rectangle B is similar to rectangle A.
Its shorter side is 6 cm.

Work out the area of rectangle B.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 1

Congruent and similar shapes

1 **B and E**

They are the same shape and size (rotated or reflected).

2 **C**

It is an enlargement of A with scale factor 2.

3 All the angles are equal, so they are the same shape: **similar**.

The sides are different lengths, so they are not the same size: **not congruent**.

4 All three sides are equal.

Condition: **SSS**

5 Scale factor = 6 ÷ 4 = 1.5

7.5 cm and **9 cm**

6 Scale factor = 6 ÷ 4 = 1.5

Longer side = 10 × 1.5 = 15 cm

Area = 6 × 15 = **90 cm^2**