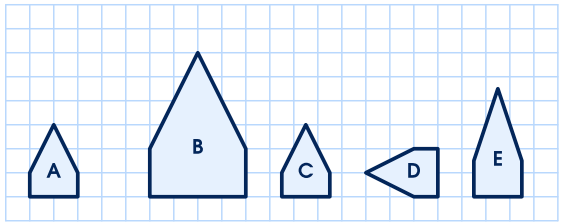
GCSE FOUNDATION · REVISION MAT 2

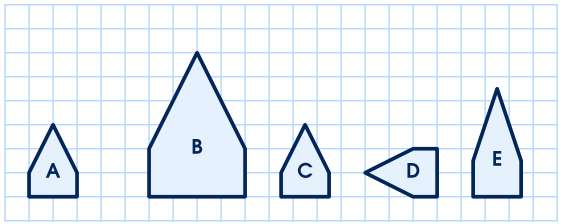
Congruent and similar shapes

1 Here are some shapes on a grid.



Which shapes are congruent to shape A?

2 Here are some shapes on a grid.

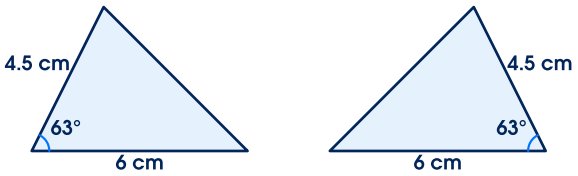


Which shape is similar to shape A but not congruent to it?

3 Two triangles both have angles 40°, 65° and 75°.
One has a shortest side of 5 cm, the other 8 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 6, 8, 9 cm.

The shortest side of XYZ is 12 cm.

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

6 Rectangle A is 3 cm by 8 cm.

Rectangle B is similar to rectangle A.
Its shorter side is 9 cm.

Work out the area of rectangle B.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 2

Congruent and similar shapes

1 **C and D**

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

2 **B**

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 Two sides and the angle between them are equal.

Condition: **SAS**

5 Scale factor = 12 ÷ 6 = 2

16 cm and **18 cm**

6 Scale factor = 9 ÷ 3 = 3

Longer side = 8 × 3 = 24 cm

Area = 9 × 24 = **216 cm^2**

Mr&Mrs MATHS