Tick all the shapes that are an enlargement of shape A.

**3**

**Calculating scale factors**

1. Complete the sentences.

A

C

B

D

A

D

B

C How do you know which shapes are enlargements?

**4**

Shape B is an enlargement, by a scale factor of Shape C is an enlargement, by a scale factor of Shape D is an enlargement, by a scale factor of

, of shape A.

, of shape A.

, of shape A.

The two triangles are similar. Find the length of *a*.

1. Shape B is an enlargement of shape A. Shape C is not an enlargement of shape A.

7 cm

5 cm

*a*

15 cm

A

C

B

*a* = cm

Talk to a partner about why this is the case.

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**7**

The rectangle is enlarged by a scale factor.

The perimeter of the enlarged rectangle is 64 m.

What is the scale factor of

enlargement?

2.8 m

5.2 m

scale factor =

**8**

The diagram shows three similar triangles.

Calculate the missing values.

53°

*b*

21 mm

*d*

*a*

37°

*c*

6 mm

18 mm

27 mm

*a* =

*b* =

*c* =

*d* =

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The two triangles are similar.

**5**

Find the area of the smaller triangle.

30 cm

4 cm 24 cm

area = cm2

These two children’s toys are similar. Find the length marked *y*.

**6**

20 cm

5 cm

18 cm *y*

*y* = cm