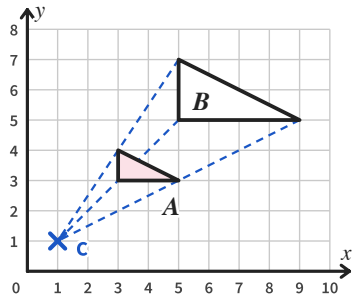
Describing enlargements

ANSWERS

1

Describe fully the single transformation that maps shape **A** onto shape **B**.
Scale factor = image side ÷ object side.



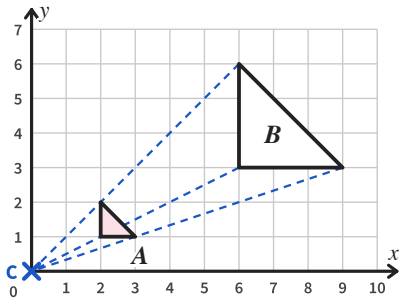
Transformation: Enlargement

Scale factor: 2

Centre: (1, 1)

2

Describe fully the single transformation that maps shape **A** onto shape **B**.



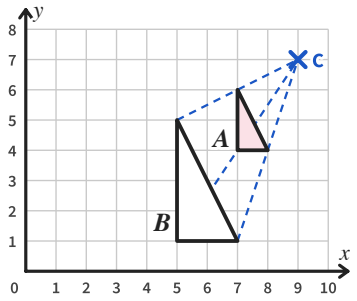
Transformation: Enlargement

Scale factor: 3

Centre: (0, 0)

3

Describe fully the single transformation that maps shape **A** onto shape **B**.



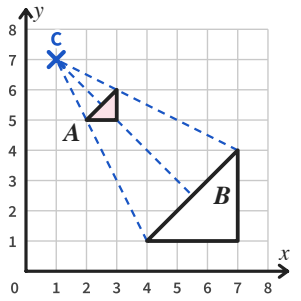
Transformation: Enlargement

Scale factor: 2

Centre: (9, 7)

4

Describe fully the single transformation that maps shape **A** onto shape **B**.



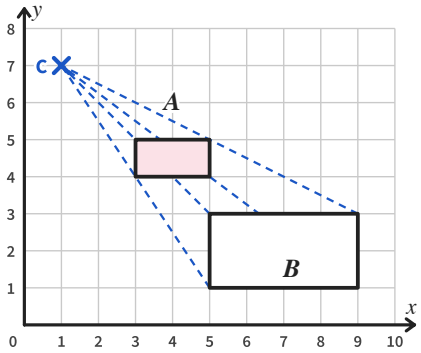
Transformation: Enlargement

Scale factor: 3

Centre: (1, 7)

5

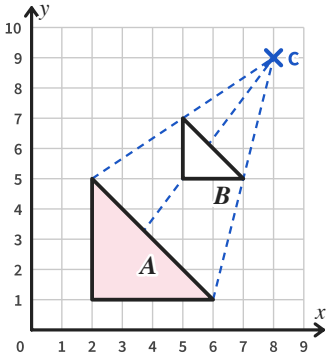
Describe fully the single transformation that maps shape **A** onto shape **B**.



Enlargement, scale factor 2, centre (1, 7)

6 Notice the change!

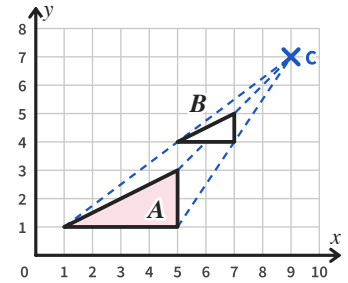
Describe fully the single transformation that maps shape **A** onto shape **B**.



Enlargement, scale factor ½, centre (8, 9)

7

Jamal says this is an enlargement, scale factor 2, centre (9, 7). Explain his mistake. Find the correct scale factor.



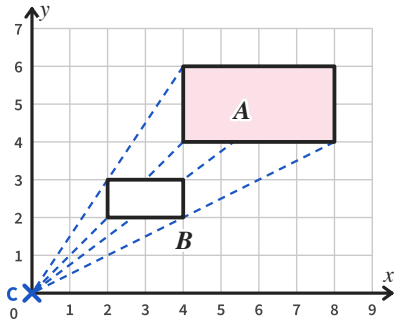
He did 4 ÷ 2, bigger ÷ smaller.

Image ÷ object = 2 ÷ 4 = ½

Scale factor ½

8

Describe fully the single transformation that maps shape **A** onto shape **B**.



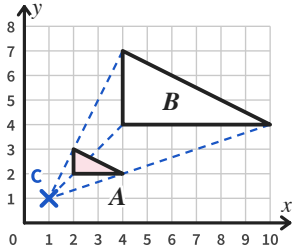
Enlargement, scale factor ½, centre (0, 0)

Describing enlargements *further practice*

ANSWERS

9

Describe fully the single transformation that maps shape A onto shape B.



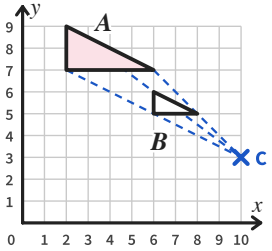
Enlargement: 6 ÷ 2 = 3

the lines meet at (1, 1)

Answer SF 3, centre (1, 1)

10

Describe fully the single transformation that maps shape A onto shape B.



Enlargement: 2 ÷ 4 = ½

the lines meet at (10, 3)

Answer SF ½, centre (10, 3)

11

A photo is enlarged. A side of 4 cm on the photo is 12 cm on the enlargement. Find the scale factor.

image ÷ object

12 ÷ 4 = 3

Answer 3

12

A side of shape A is 10 cm.
The matching side of shape B is 5 cm.
Find the scale factor of the enlargement that maps A onto B, and of the one that maps B onto A.

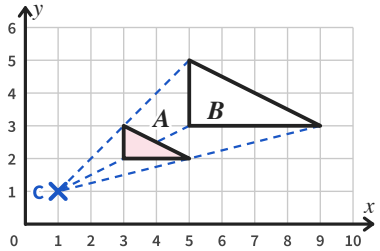
A onto B: 5 ÷ 10 = ½

B onto A: 10 ÷ 5 = 2

Answer ½, then 2

13

Describe fully the single transformation that maps shape B onto shape A.



Enlargement: object B, 2 ÷ 4 = ½

the lines meet at (1, 1)

Answer SF ½, centre (1, 1)

14

A is enlarged to give B.
Lines through matching corners meet at (2, 1). A side of A is 3 squares; on B it is 9. Describe the enlargement fully.

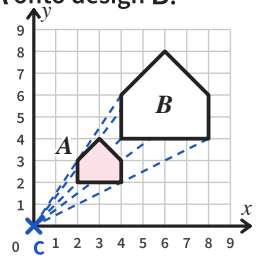
Enlargement: 9 ÷ 3 = 3

centre where the lines meet

Answer SF 3, centre (2, 1)

15

Badge design A is enlarged to make design B for a T-shirt. Describe fully the single transformation that maps design A onto design B.



Enlargement: 4 ÷ 2 = 2

the lines meet at (0, 0)

Answer SF 2, centre (0, 0)

16

Mo describes a transformation as "Enlargement, scale factor 2".
Why is this not a full description?

the same scale factor about a different

centre puts B in a different place

Answer It needs the centre