#### Mathematics

# Enlargement by an integer scale factor

Lesson 1 of 8

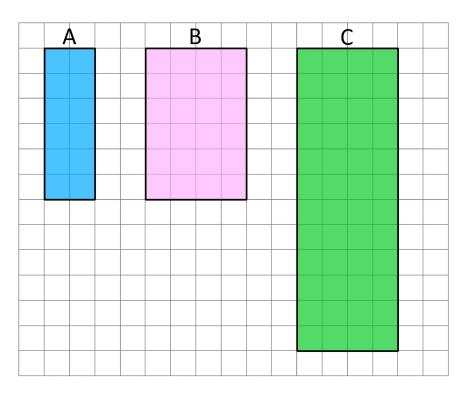
Downloadable Resource

Miss Kidd-Rossiter



# Try this

What's the same and what's different?



Support on next slide

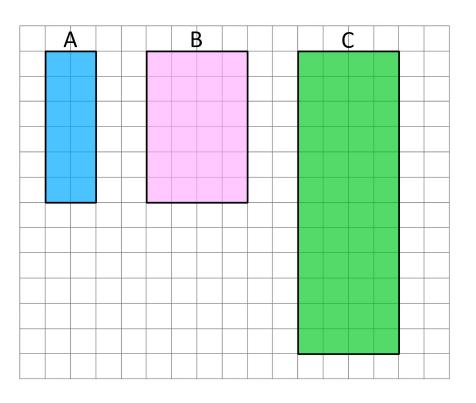


# Try this

What's the same and what's different?

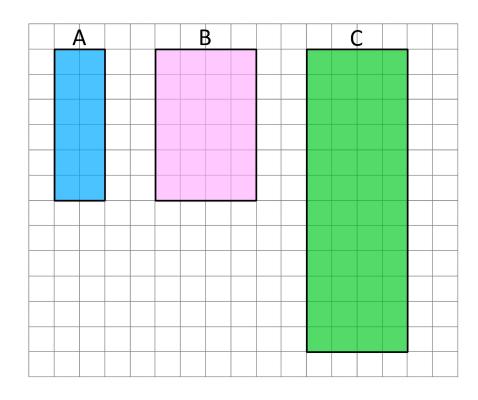
Hint - what's the same/different about the:

- Angles
- Side lengths





### Connect



One shape is an enlargement of another if

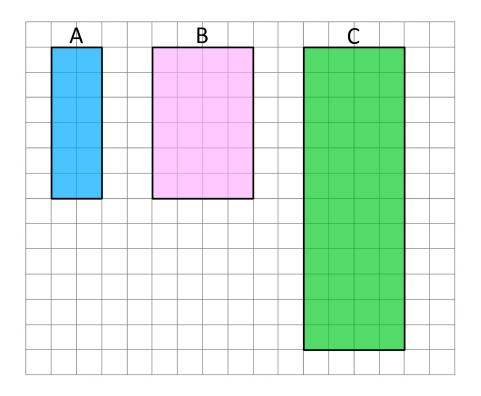
 The same scale factor can be been used to multiply the lengths of each side of the original shape to give the lengths of each corresponding side of the enlarged shape.

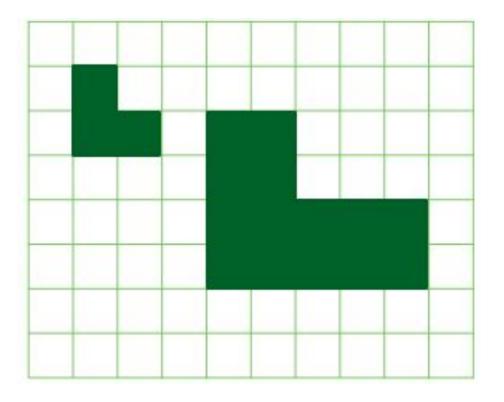
#### and

The angles of both shapes are the same.



## Connect

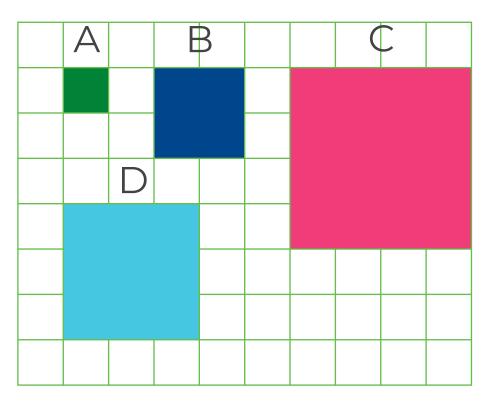






# Independent task

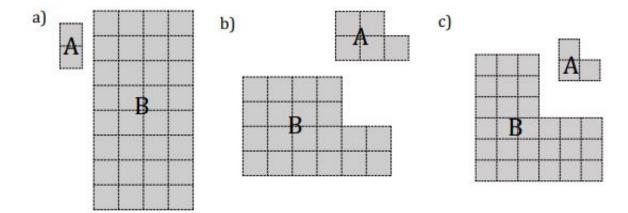
- 1. The below shapes have been enlarged. What scale factor
  - have they been enlarged by?
  - a) A is the object, B is the image
  - b) A is the object, C is the image
  - c) A is the object, D is the image
  - d) B is the object, C is the image





# Independent task

2. State the scale factor of enlargement for each of the following transformations from A to B.

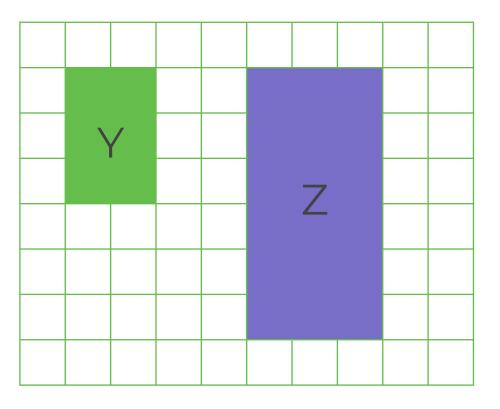


3. Find the perimeters of each of the shapes in Q2. What do you notice?



# Independent task

4. Explain why Z is **not** an enlargement of Y





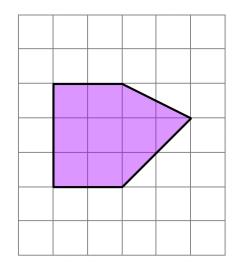
## **Explore**

Draw a copy of the purple pentagon onto squared paper

Draw enlargements of the pentagon with the following scale

factors:

scale factor 2? scale factor 3? scale factor 4? scale factor n?



What is the area of the enlarged shape?

What do you notice?

