## AIMING HIGH

## IS A SQUARE A RECTANGLE



How many rectangles can you find in this shape?
Which of your rectangles are the same (congruent)?
Which of your rectangles are similar (enlargements of each other)?
Record all the rectangles you can find in the copies of the rectangle below?


## HELP

First shade all the rectangles that measure 2 units by 1 unit, each on a different copy of the diagram. Great, that's a good start.

Now shade all the squares. How many rectangles have you found now? You are well on your way.

Can you see any 3 by 1 rectangles? Good, now shade them and then look for more possibilities.

## NEXT

Write down your answer to the question 'Is a square a rectangle?' and give a full explanation.

Describe the transformations that map each rectangle onto other congruent rectangles.
Describe the transformations that map each rectangle onto other similar rectangles. Can you do this without using reflections?

Draw your own diagram and make up a similar problem.


