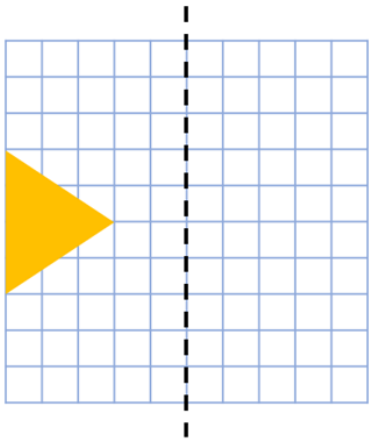
Home Learning Wednesday 17th June 2020 Maths

L.O: I am learning to reflect shapes horizontally and vertically along a mirror line.

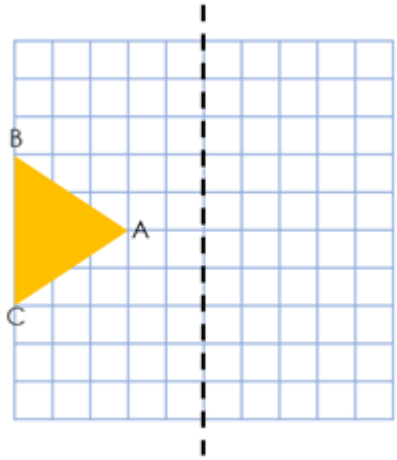
Today you will learn how to reflect shapes using lines that are parallel to the axes. You will analyse what happens to the object when reflected; what is the same? What is different? We will also look at what happens to coordinates when reflected in a mirror line.

Answer the questions on the separate worksheet that comes with this assignment. Turn the completed work in so that the teacher can mark and comment on your work.

Reflecting Shapes



We can reflect shapes using **mirror lines** which are parallel to the **y axis**. To reflect the triangle we need to identify where the point of each vertex is on the grid in relation to the mirror line. The best way to do this is to label each point.

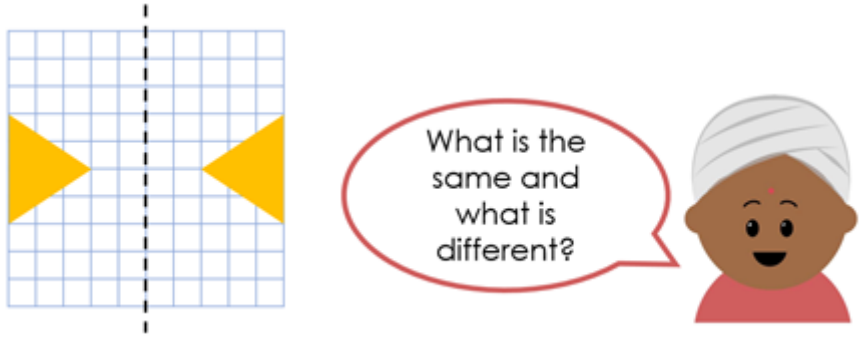


Point A is **2 squares away** from the mirror line on the left, so its reflected point will also be **2 squares away** from the mirror line on the right hand side.

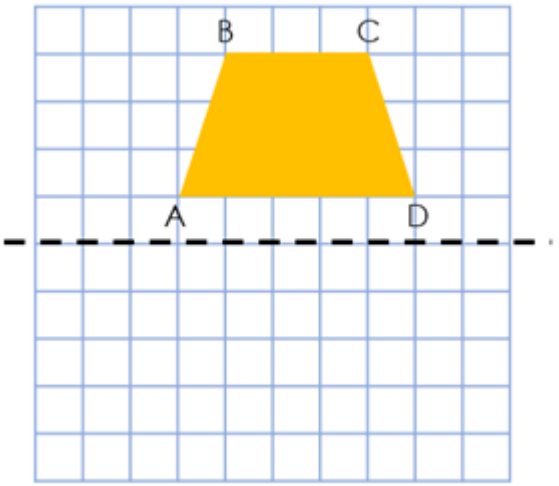
Point B is **5 squares away** from the mirror line on the left, so its reflected point will also be **5 squares away** from the mirror line on the right hand side. It is also **7 squares up** from the origin on the *y* axis, so its reflected point will also be **7 squares up** on the *y* axis.

Point C is **5 squares away** from the mirror line on the left, so its reflected point will also be **5 squares away** from the mirror line on the right hand side. It is also **3 squares up** from the origin on the *y* axis, so its reflected point will also be **3 squares up** on the *y* axis.

Here is the shape reflected in the mirror line



We can also reflect shapes using **mirror lines** which are parallel to the **x axis**.



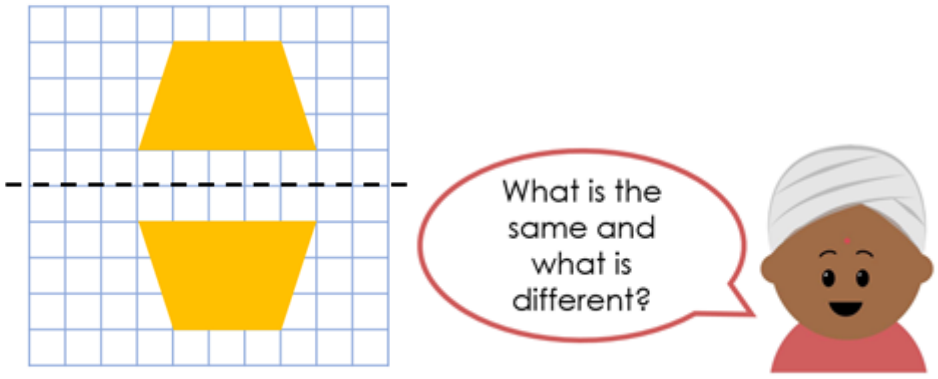
Point A is **1 square away** from the mirror line on the top, so its reflected point will also be **1 square away** from the mirror line on the bottom.

Point B is **4 squares away** from the mirror line, so its reflected point will also be **4 squares away** from the mirror line.

Point C is **4 squares away** from the mirror line, so its reflected point will also be **4 squares away** from the mirror line. It is also **3 squares to the right of point B**, so its reflected point will also be **3 squares to the right of reflected point B**.

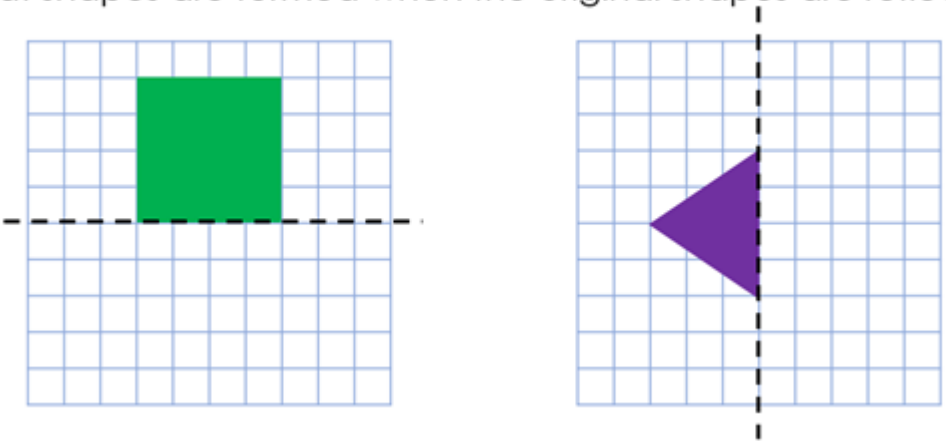
Point D is **1 square away** from the mirror line, so its reflected point will also be **1 square away** from the mirror line. It is also **5 squares to the right of point A**, so its reflected point will also be **5 squares to the right of reflected point A**.

Here is the shape reflected in the mirror line



Let's Practise

What shapes are formed when the original shapes are reflected?



Now go to the worksheet for today's tasks and choose your challenge!