# <u>Discussion Problems</u> Step 2: Reflection

### **National Curriculum Objectives:**

Mathematics Year 5: (5P2) <u>Identify, describe and represent the position of a shape</u> following a refection or translation, using the appropriate language, and know that the shape has not changed

#### About this resource:

This resource has been designed for pupils who understand the concepts within this step. It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More Year 5 Position and Direction resources.

Did you like this resource? Don't forget to review it on our website.

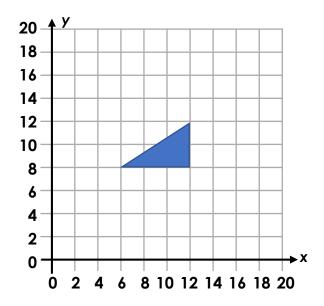


## **Reflection**

1. Bushra is reflecting the triangle around the grid.

Explore all the different ways possible to reflect the shape given in the first quadrant.



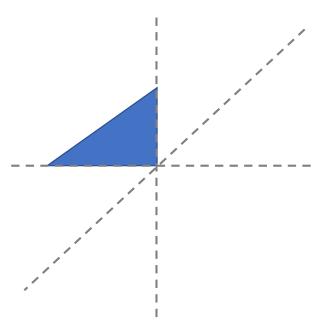


What are the new coordinates of all the different reflections?

2. Amanda is building a shape by reflecting it more than once to make it look bigger.

Using horizontal, vertical and diagonal mirror lines, explore the different shapes that can be created by building up on the reflection each time.





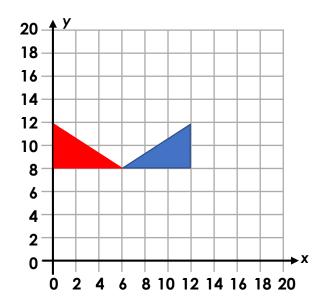
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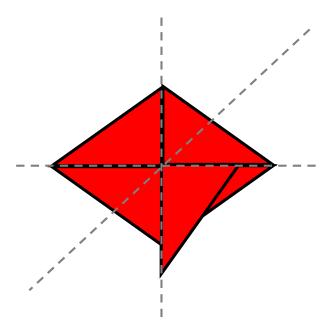
What are the new coordinates of all the different reflections?

Various possible answers include: (0, 8), (0, 12), (6, 8)

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Various possible answers: See example above.

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