Homework/Extension Step 4: Translation

National Curriculum Objectives:

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

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Questions to support identifying translated shapes. Includes 1 x 1 squares only. Expected Questions to support identifying translated shapes. Includes regular polygons with a maximum of six sides.

Greater Depth Questions to support identifying and drawing translated shapes. Includes irregular polygons with a maximum of eight sides.

Questions 2, 5 and 8 (Varied Fluency)

Developing Questions to support understanding of the instructional language used in translations. Only includes 1×1 squares.

Expected Questions to support understanding of the instructional language used in translations. Includes regular polygons with a maximum of six sides.

Greater Depth Questions to support understanding of the instructional language used in translations. Includes irregular shapes with up to eight sides.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Use knowledge and understanding of translation to prove whether a statement is correct. Only includes 1×1 squares.

Expected Use knowledge and understanding of translation to prove whether a statement is correct. Includes regular polygons with a maximum of six sides.

Greater Depth Use knowledge and understanding of translation to prove whether a statement is correct. Includes irregular shapes with up to eight sides.

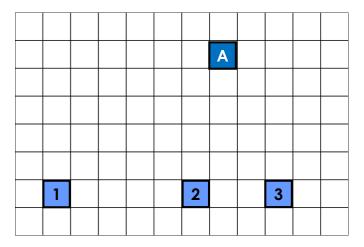
More Year 5 Position and Direction resources.

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



Translation

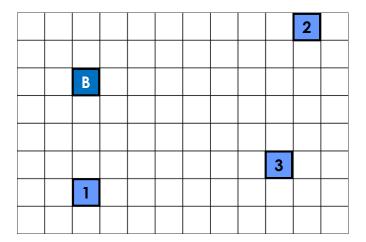
1. Tick the translation of Shape A which has been translated 1 left and 5 down.





VF HW/Ext

2. Shape B has been translated three times. Which translation is the odd one out?



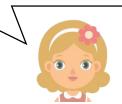


VF HW/Ext

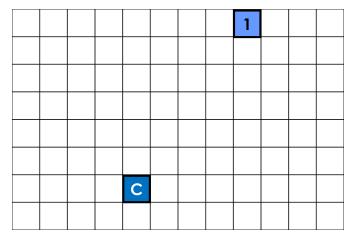
3. Maeve has translated Shape C 4 right and 6 up.

She says,

If I switch the numbers around, Shape C will still arrive at the position of Shape 1.



Do you agree? Explain your answer.



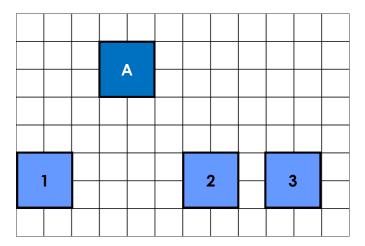


HW/Ext



Translation

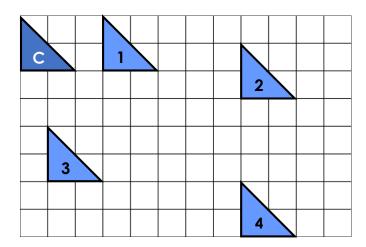
4. Tick the translation of Shape A which has been translated 6 right and 4 down.





VF HW/Ext

5. Shape C has been translated four times. Which translation is the odd one out?



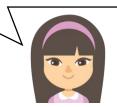


VF HW/Ext

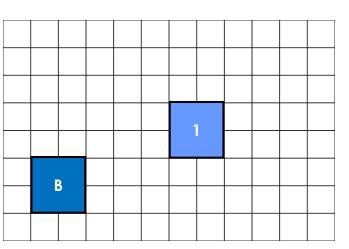
6. Imogen has translated Shape B 5 right and 2 up.

She says,

If I switch the numbers around, Shape B will still arrive at the position of Shape 1.



Do you agree? Explain your answer.



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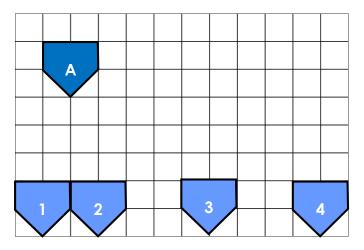
RPS HW/Ext





Translation

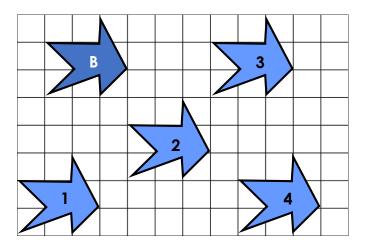
7. Tick the translation of Shape A which has been translated 1 left and 5 down.





VF HW/Ext

8. Shape B has been translated four times. Which translation is the odd one out?



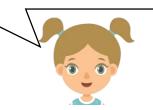


HW/Ext

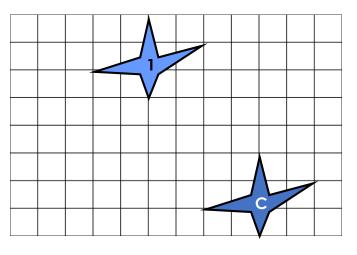
9. Aurora has translated Shape C 4 left and 5 up.

She says,

If I switch the numbers around, Shape C will not arrive at the position of Shape 1.



Do you agree? Explain your answer.





RPS HW/Ext





Homework/Extension Translation

Developing

- 1. Shape 2
- 2. Various possible answers. For example, Shape 1 is the odd one out as it is the only translation shown that has not moved left/right.
- 3. If Shape C translates 6 right and 4 up instead, it will not arrive at the same position as Square 1 so Maeve is incorrect.

Expected

- 4. Shape 3
- 5. Various possible answers. For example, Shape 1 could be the odd one out because it is the only translation that has not moved up/down.
- 6. If Shape B translates 2 right and 5 up instead, it will not arrive at the same position as Square 1 so Imagen is incorrect.

Greater Depth

- 7. **Shape 1**
- 8. Various possible answers. For example, Shape 4 is the odd one out because when its total movement is added together, it does not equal 6.
- 9. If Shape C translates 5 left and 4 up instead, it will not arrive at the same position as Square 1 so Aurora is correct.