Year 2 – Summer Block 1 – Position and Direction – Describing Turns

About This Resource:

This PowerPoint has been designed to support your teaching of this small step. It includes a starter activity and an example of each question from the Varied Fluency and Reasoning and Problem Solving resources also provided in this pack. You can choose to work through all examples provided or a selection of them depending on the needs of your class.

National Curriculum Objectives:

Mathematics Year 2: (2P2) Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)
Mathematics Year 2: (2P1) Order and arrange combinations of mathematical objects in patterns and sequences

More Year 2 Position and Direction resources.

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

Step 2: Describing Turns

Introduction

Meredith's class is having a cinema party.
How can they get from the school to the cinema and back?

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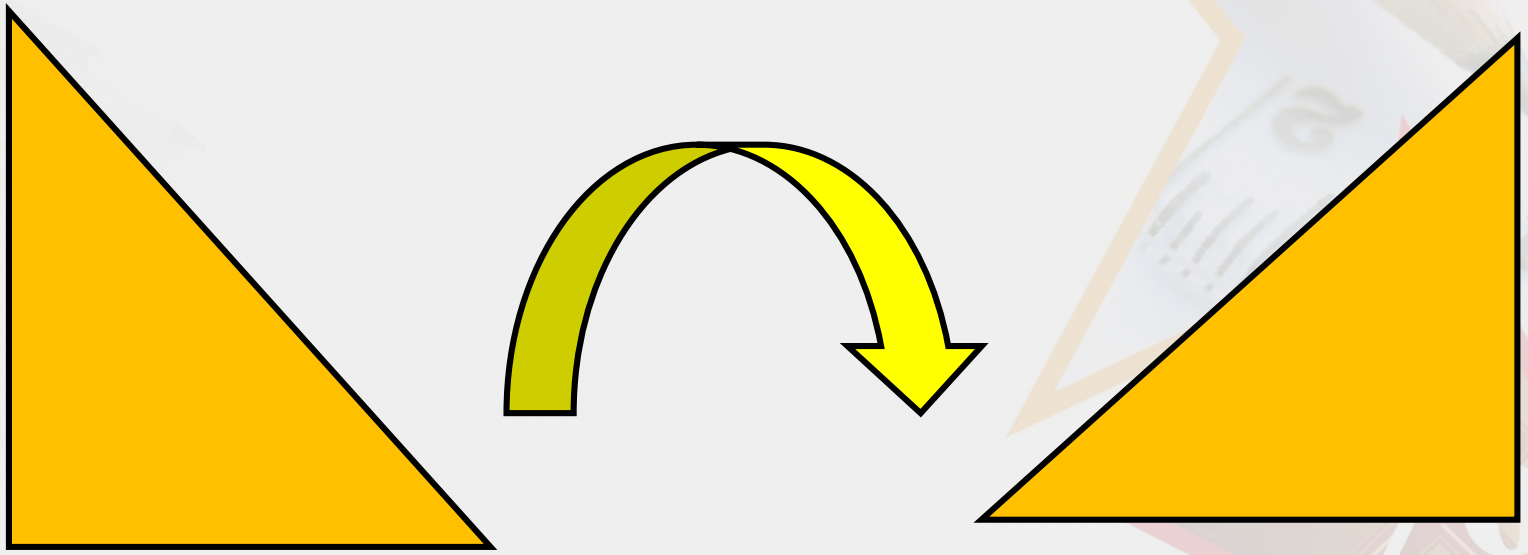
Meredith's class is having a cinema party.
How can they get from the school to the cinema and back?

Various possible answers, for example: Leave school and make a quarter turn anti-clockwise. Walk straight then make a quarter turn clockwise. Walk straight then a quarter turn anti-clockwise. Walk straight then make another quarter turn anti-clockwise and walk through the cark park to the cinema.

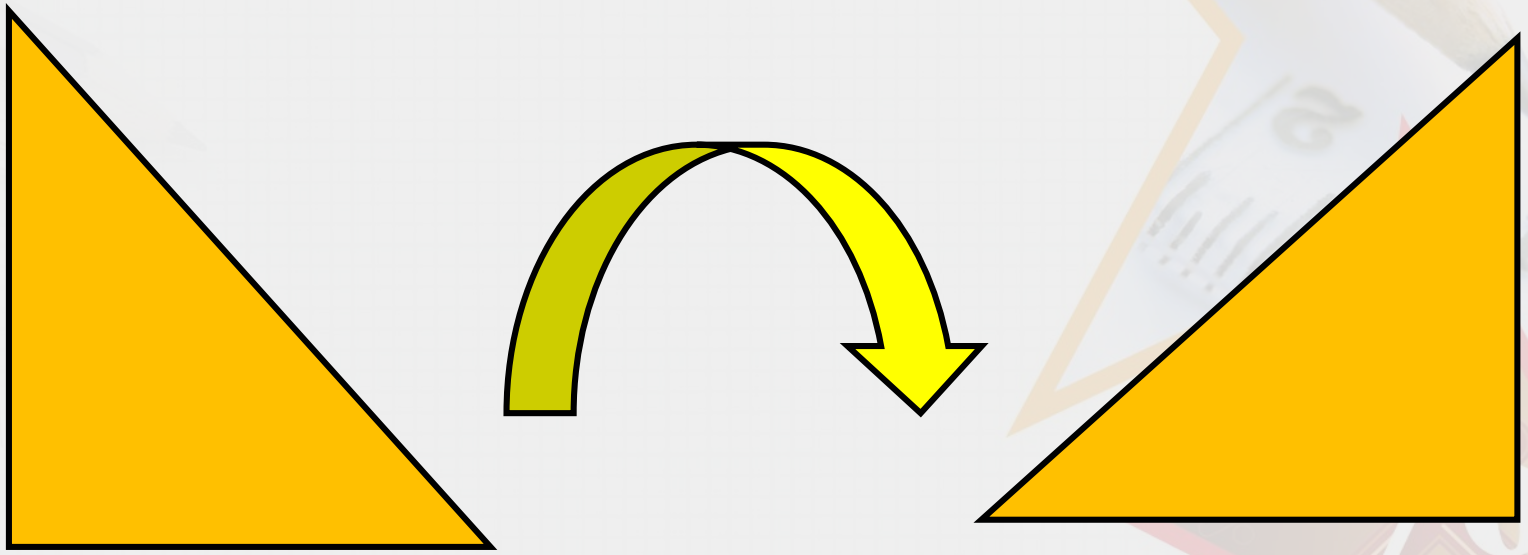
Varied Fluency 1

Draw what the shape would look like after a half turn anti-clockwise.



Varied Fluency 1

Describe how the triangle has turned.



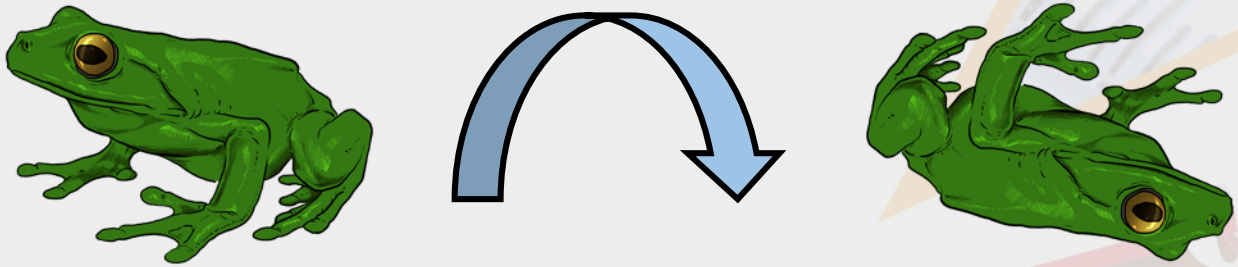
Various possible answers, for example:

The triangle has made a three quarter turn.

Varied Fluency 2

True or false?

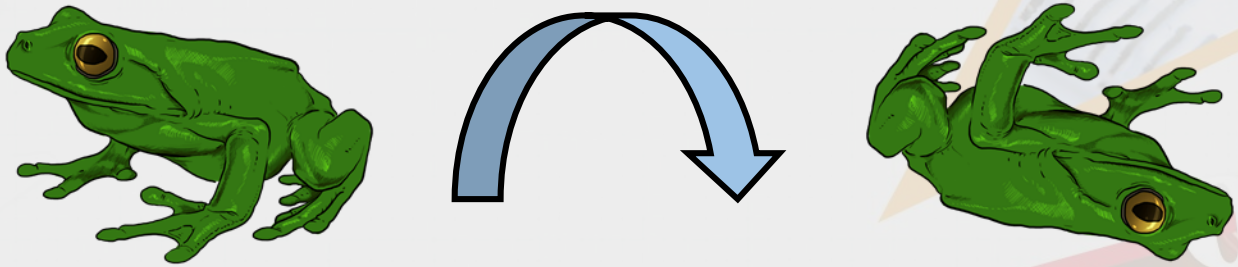
The frog has made a quarter turn clockwise.



Varied Fluency 2

True or false?

The frog has made a quarter turn clockwise.



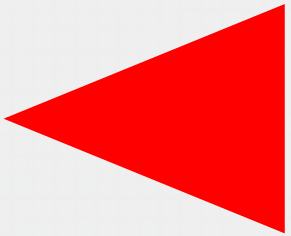
False, the frog has made a half turn clockwise.

Varied Fluency 3

The triangle makes a three quarter turn anti-clockwise.

Which one is it now?

a



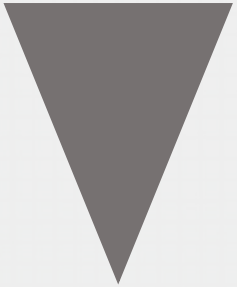
b

c

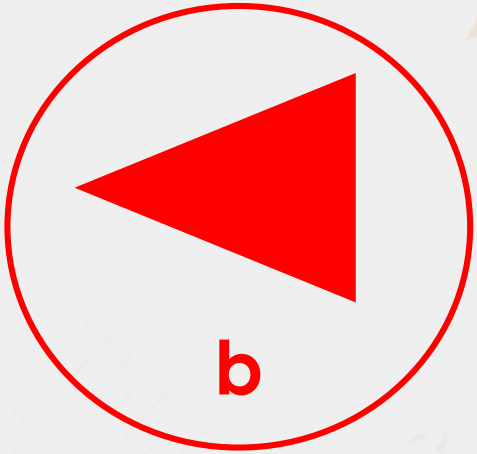
Varied Fluency 3

The triangle makes a three quarter turn anti-clockwise.

Which one is it now?



a



b

c

Varied Fluency 4

True or false?

The shape could have made a whole turn to get to its new position.

New position:

Varied Fluency 4

True or false?

The shape could have made a whole turn to get to its new position.

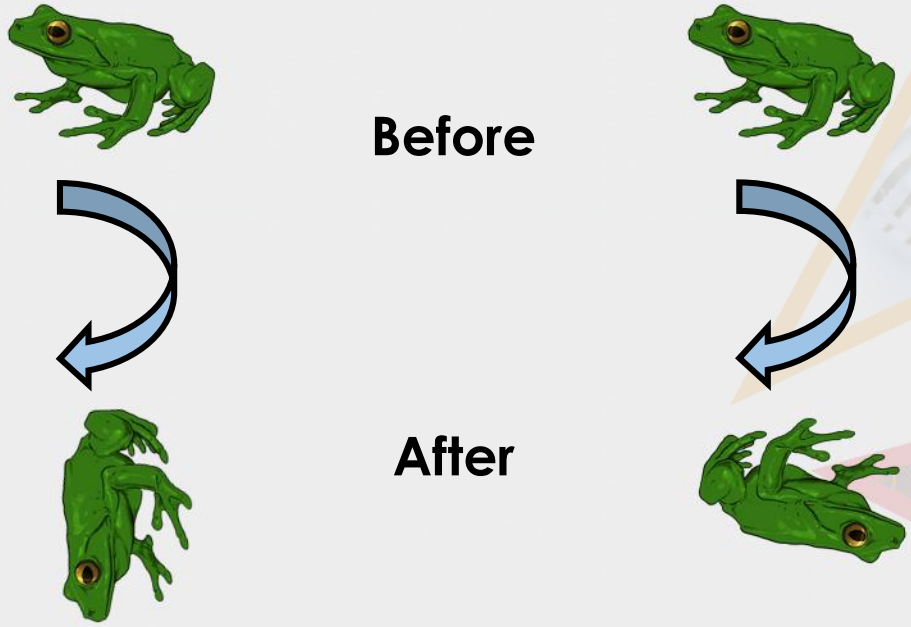
New position:

False, the shape has made a quarter turn anti-clockwise or a three quarter turn clockwise to get to its new position.

Reasoning 1

Two frogs start in the same position.

They want to turn the same amount in the same direction.



What did they get wrong? Explain.

Reasoning 1

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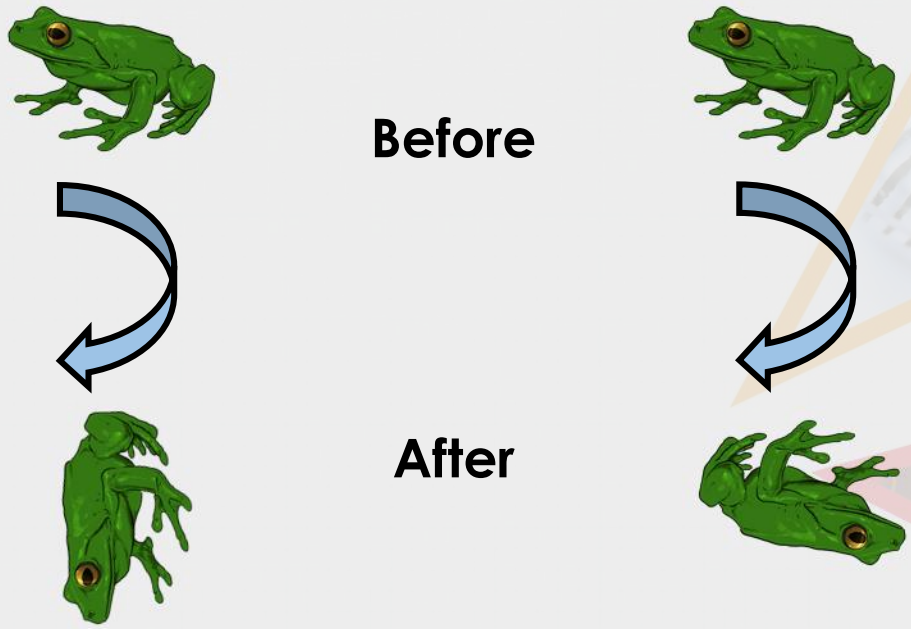
They want to turn the same amount in the same direction.



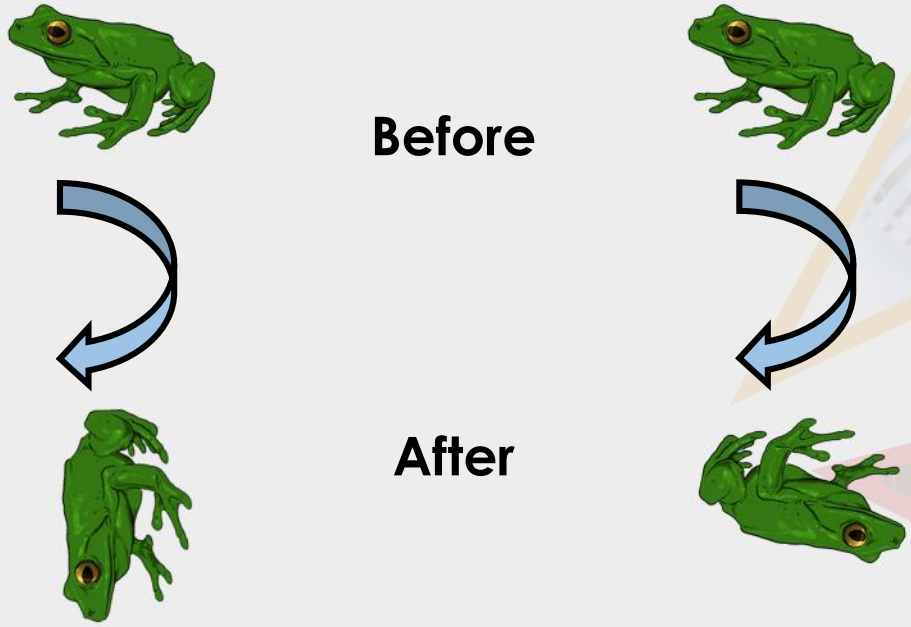
What did they get wrong? Explain.

The first frog has…

Reasoning 1

Two frogs start in the same position.

They want to turn the same amount in the same direction.

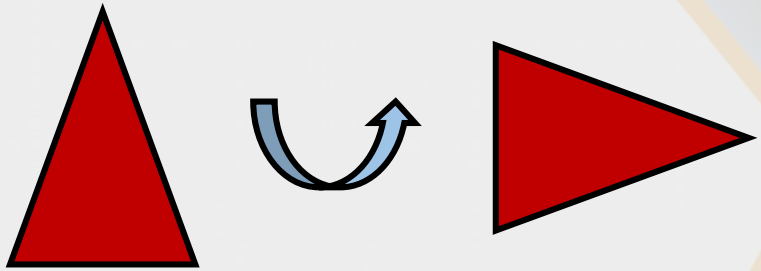


What did they get wrong? Explain.

The first frog has made a three quarter turn clockwise and the second has made a half turn clockwise.

Reasoning 2

A triangle has been turned.



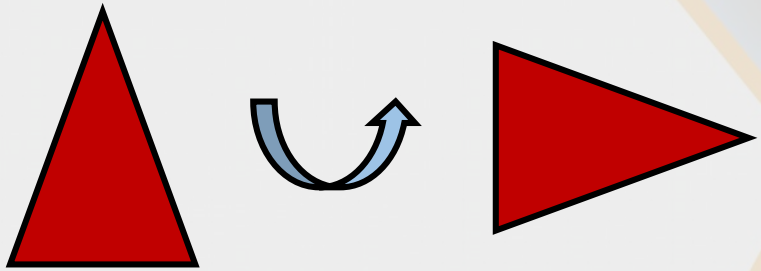
Jared says,

The shape has made a three quarter turn clockwise.

Is Jared correct? Explain why.

Reasoning 2

A triangle has been turned.



Jared says,

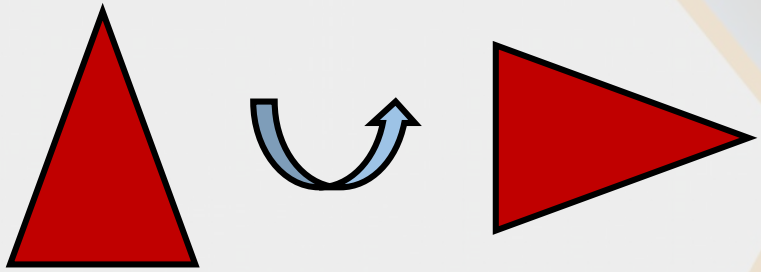
The shape has made a three quarter turn clockwise.

Is Jared correct? Explain why.

Jared is not correct because…

Reasoning 2

A triangle has been turned.



Jared says,

The shape has made a three quarter turn clockwise.

Is Jared correct? Explain why.

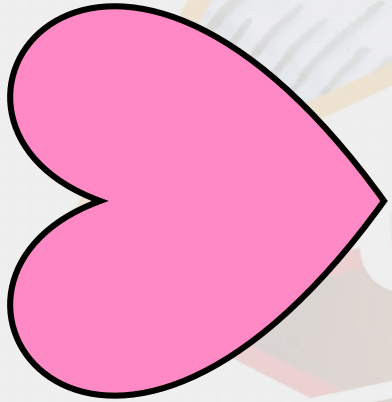
Jared is not correct because the shape has made a three quarter turn anti-clockwise.

Problem Solving 1

How many different ways could Shape A have turned to get to the position of Shape B?

Shape A

Shape B

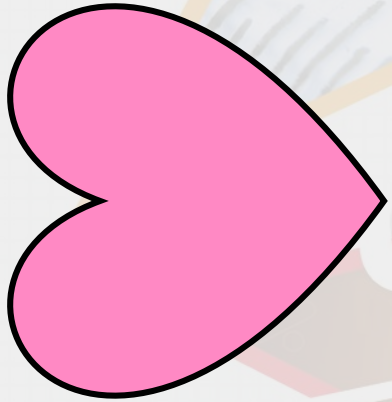


Problem Solving 1

How many different ways could Shape A have turned to get to the position of Shape B?

Shape A

Shape B



2 ways: a three quarter turn clockwise or a quarter turn anti-clockwise.