

Year 3 – Summer Block 3 – Properties of Shape – Turns and Angles

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 3: (3G4a) [Recognise that angles are a property of a shape or a description of a turn](#)

Mathematics Year 3: (3G4b) [Identify right angles, recognise that two right angles make a half turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle](#)

More [Year 3 Properties of Shape](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Step 1: Turns and Angles

Introduction

Match the starting clock to the durations and the turns that the minute hand has made.

Start



+ 30 mins



**Half turn
clockwise**

+ 45 mins



**Quarter turn
clockwise**

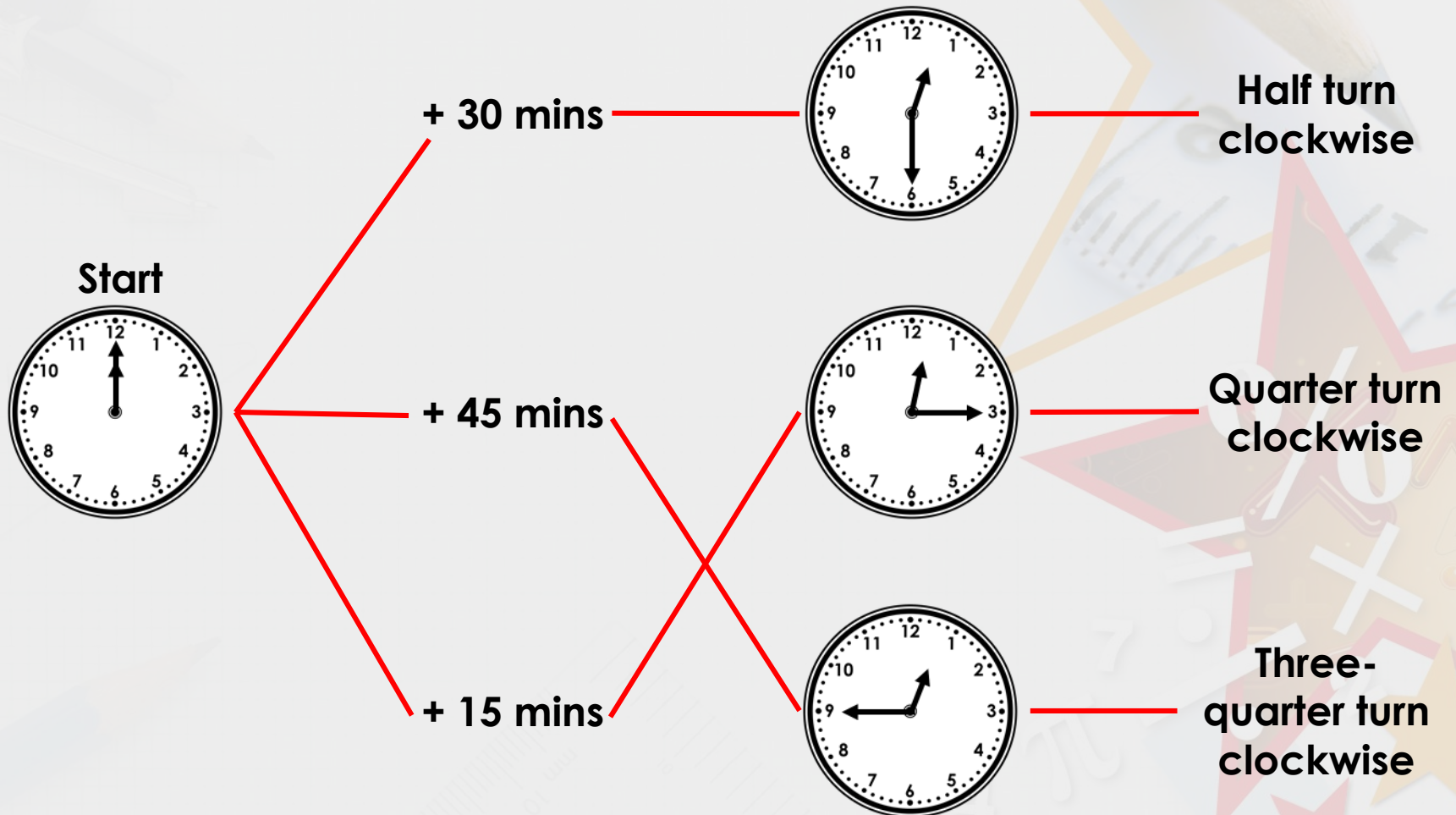
+ 15 mins



**Three-
quarter turn
clockwise**

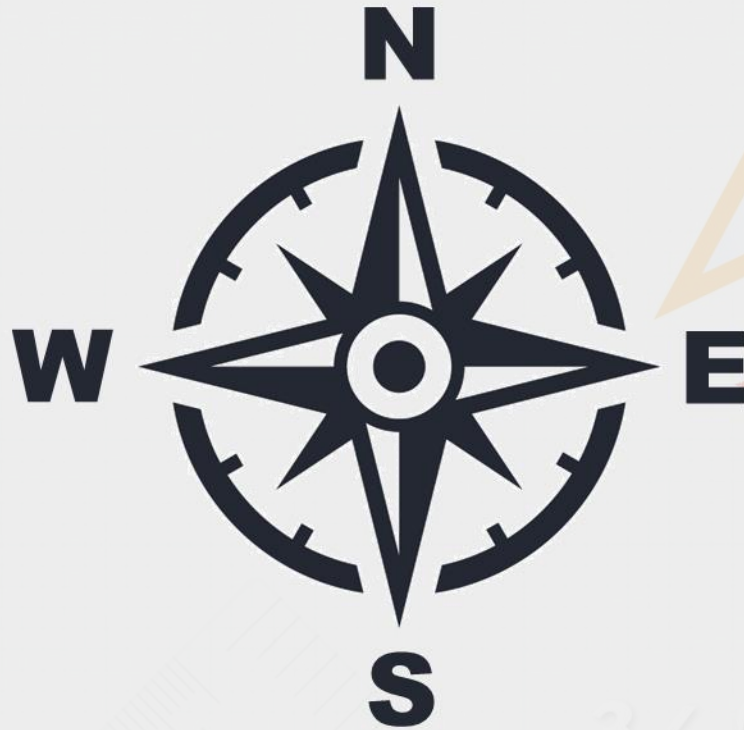
Introduction

Match the starting clock to the durations and the turns that the minute hand has made.



Varied Fluency 1

**Start at east.
Turn three quarters clockwise.
Which direction are you now facing?**



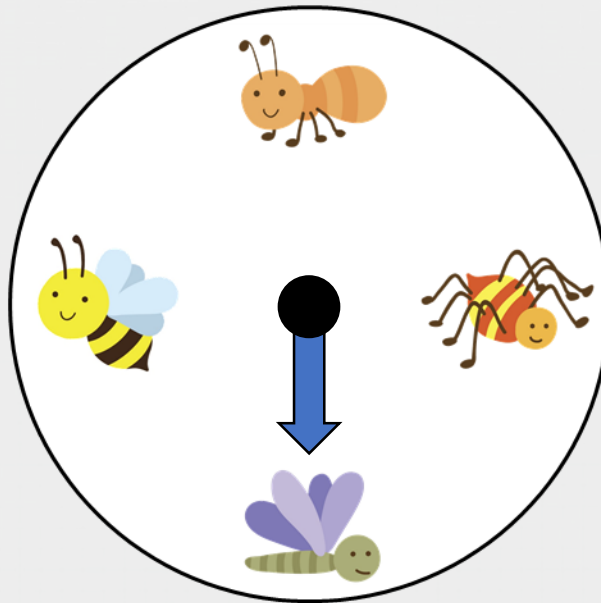
Varied Fluency 1

**Start at east.
Turn three quarters clockwise.
Which direction are you now facing?**



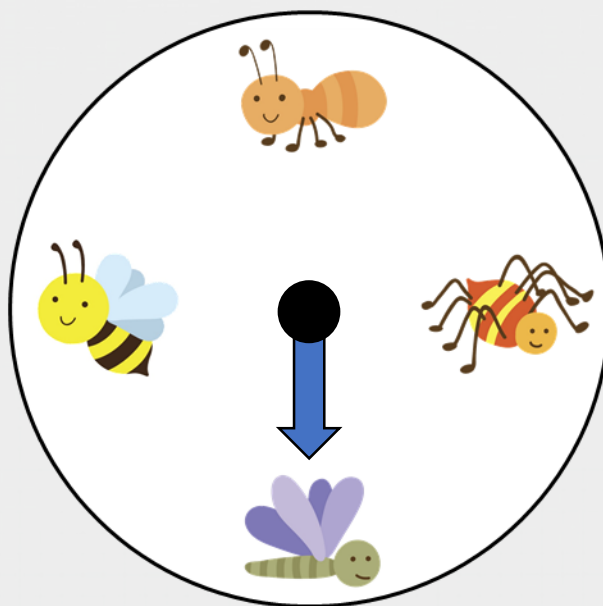
Varied Fluency 2

What turn does the spinner need to make to get from the dragonfly to the spider?



Varied Fluency 2

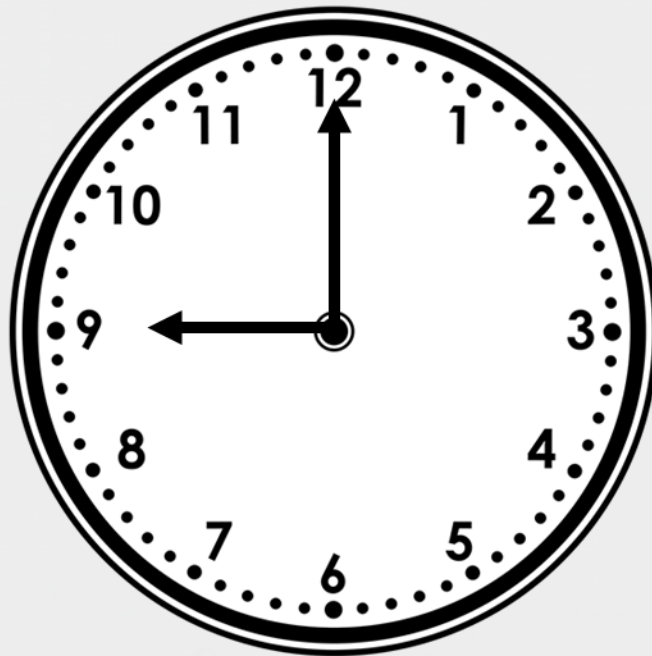
What turn does the spinner need to make to get from the dragonfly to the spider?



A quarter turn anti-clockwise or a three-quarter turn clockwise.

Varied Fluency 3

If the hour hand is turned a $\frac{1}{4}$ turn, what time will it be?



Varied Fluency 3

If the hour hand is turned a $\frac{1}{4}$ turn, what time will it be?



12 o'clock



6 o'clock

Varied Fluency 4

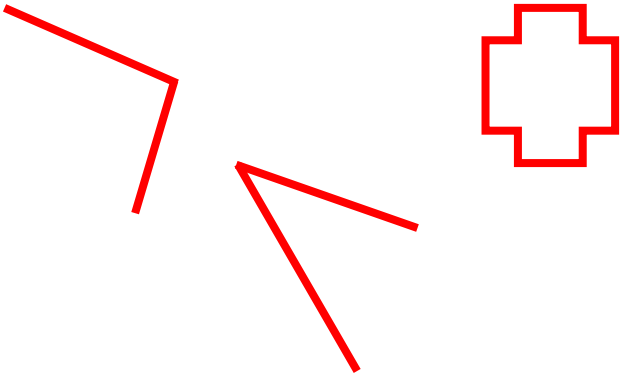

Sort these images into the table.

| All lines make angles | Not all lines make angles |
|-----------------------|---------------------------|
| | |



Varied Fluency 4

Sort these images into the table.

| All lines make angles | Not all lines make angles |
|---|---|
|  |  |

Problem Solving 1

Iqbal is thinking of a shape.

He says,



The shape has 6 angles that
are the same size.

Draw the shape that he is thinking of.

Problem Solving 1

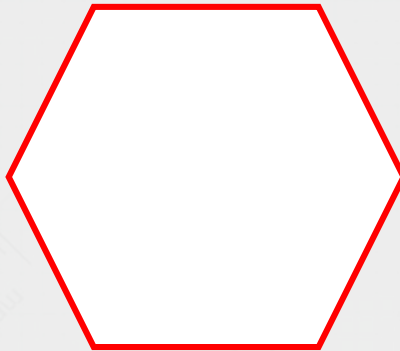
Iqbal is thinking of a shape.

He says,



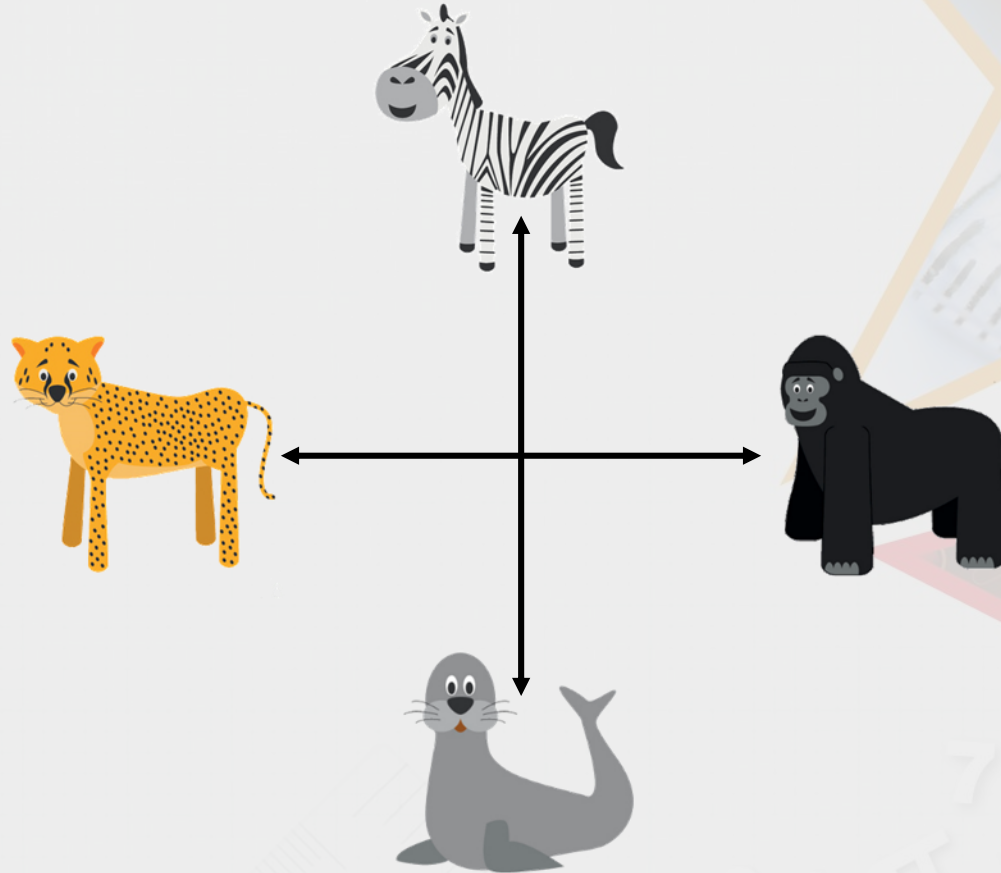
The shape has 6 angles that
are the same size.

Draw the shape that he is thinking of.



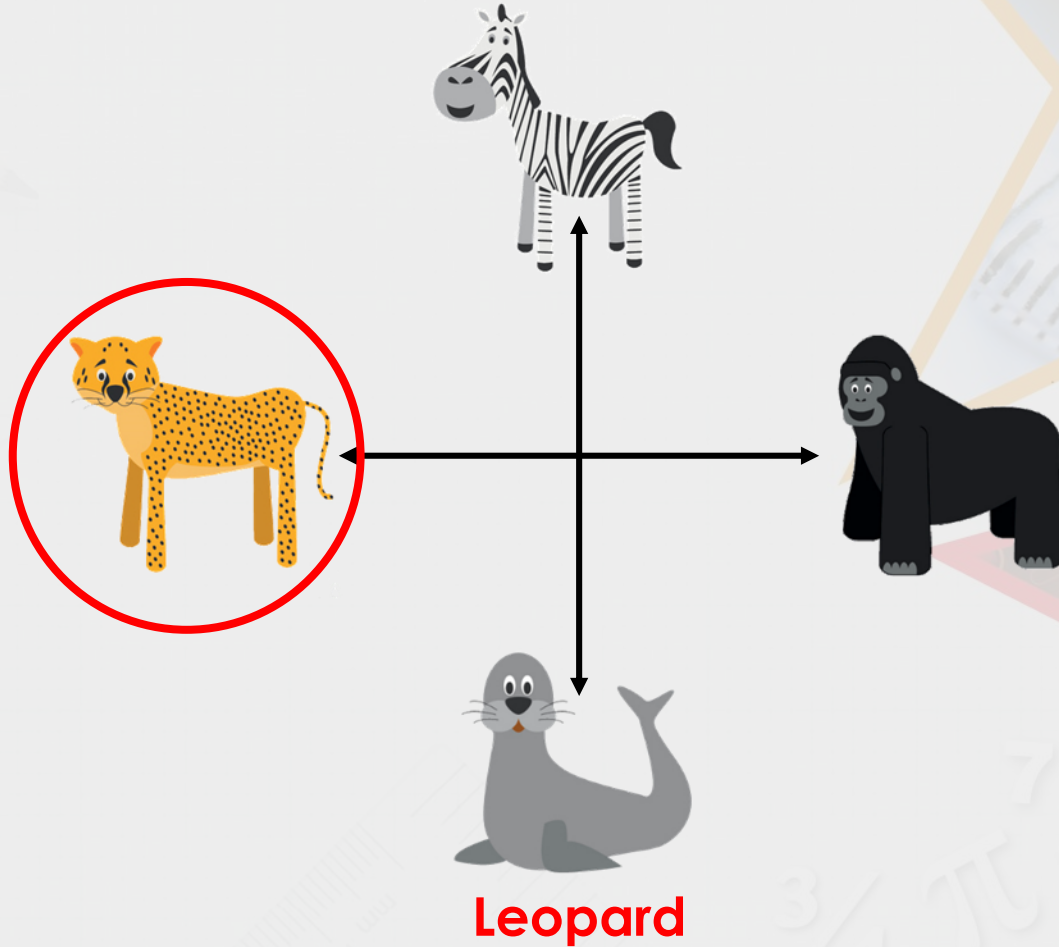
Problem Solving 2

After a three quarter turn anti-clockwise, you are now facing the zebra. Which animal were you facing when you started?



Problem Solving 2

After a three quarter turn anti-clockwise, you are now facing the zebra. Which animal were you facing when you started?



Reasoning 1

A compass needle has moved from south to north.

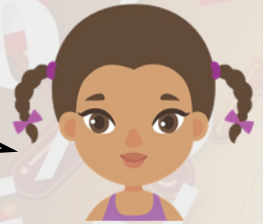
Jon says,



It has moved a half turn clockwise.



Fiona says,



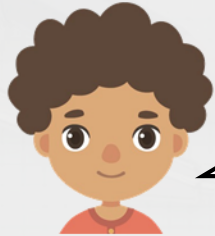
It has moved a half turn anti-clockwise.

Who is correct? Explain how you know.

Reasoning 1

A compass needle has moved from south to north.

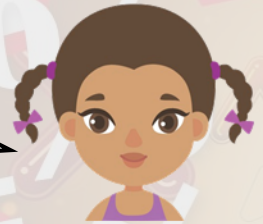
Jon says,



It has moved a half turn clockwise.



Fiona says,



It has moved a half turn anti-clockwise.

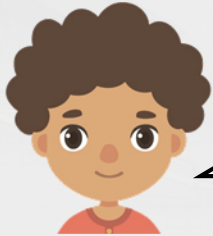
Who is correct? Explain how you know.

Both Jon and Fiona could be correct because...

Reasoning 1

A compass needle has moved from south to north.

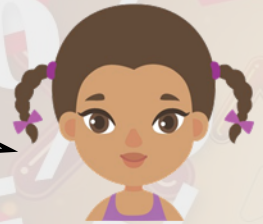
Jon says,



It has moved a half turn clockwise.



Fiona says,



It has moved a half turn anti-clockwise.

Who is correct? Explain how you know.

Both Jon and Fiona could be correct because a half turn in either direction from the same starting point will end up at north.