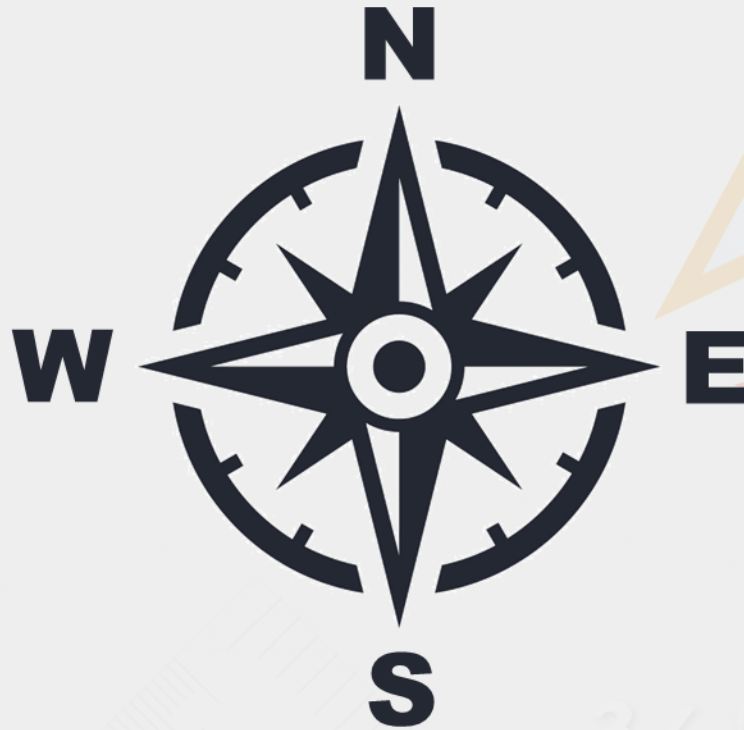


# Step 1: Turns and Angles

## Varied Fluency 1

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



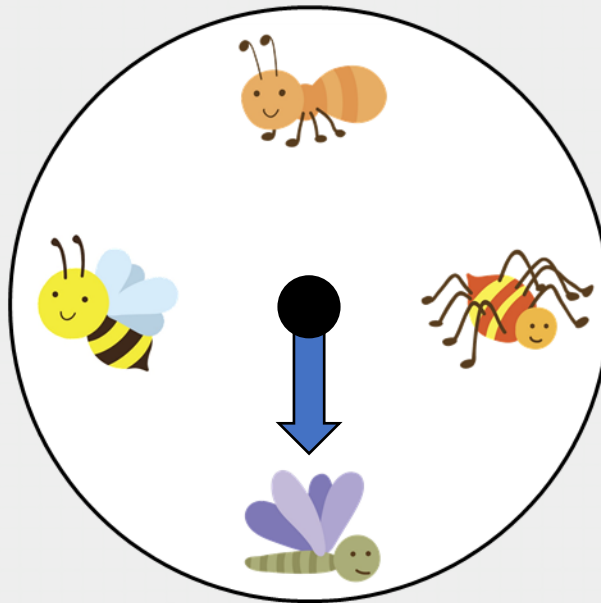
## Varied Fluency 1

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



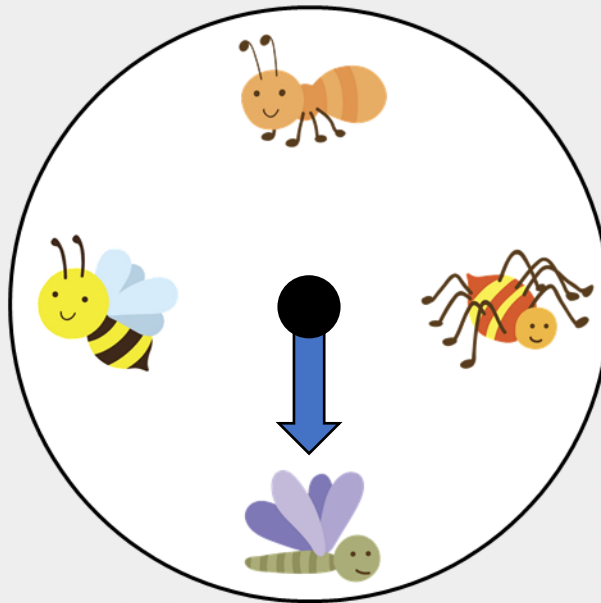
## Varied Fluency 2

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



## Varied Fluency 2

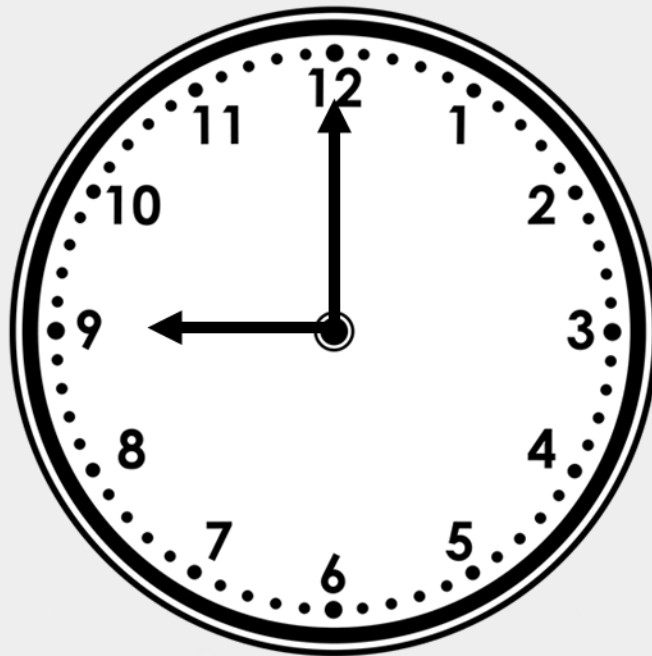
**What turn does the spinner need to make to get from the dragonfly to the spider?**



**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?

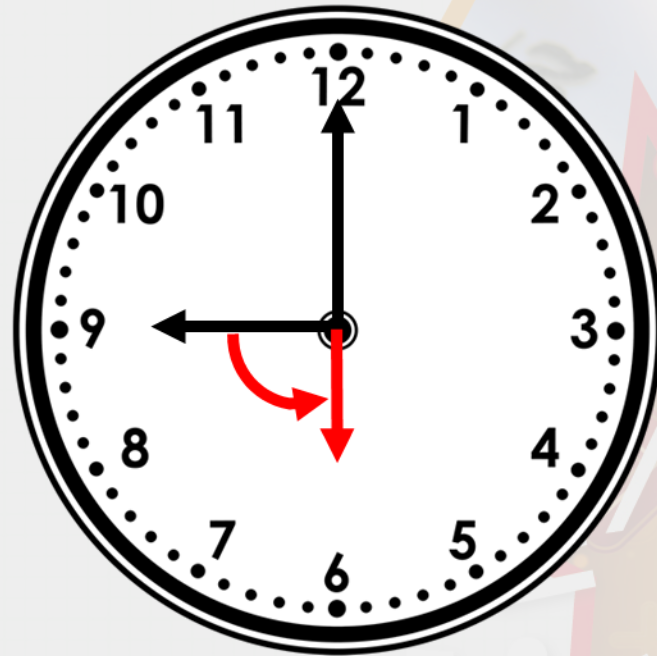


### Varied Fluency 3

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

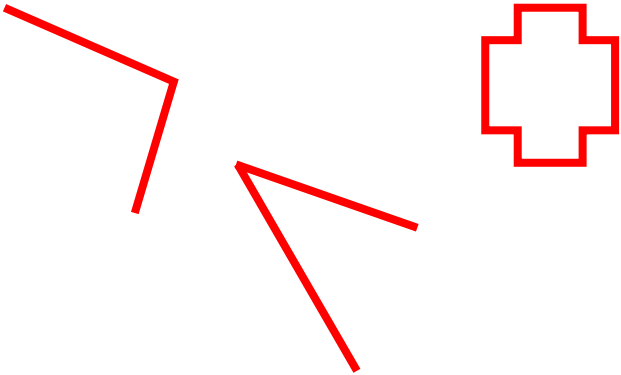

Sort these images into the table.

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

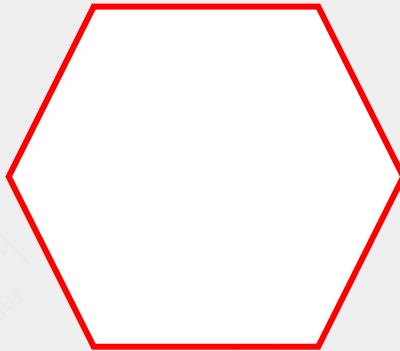
Iqbal is thinking of a shape.

He says,



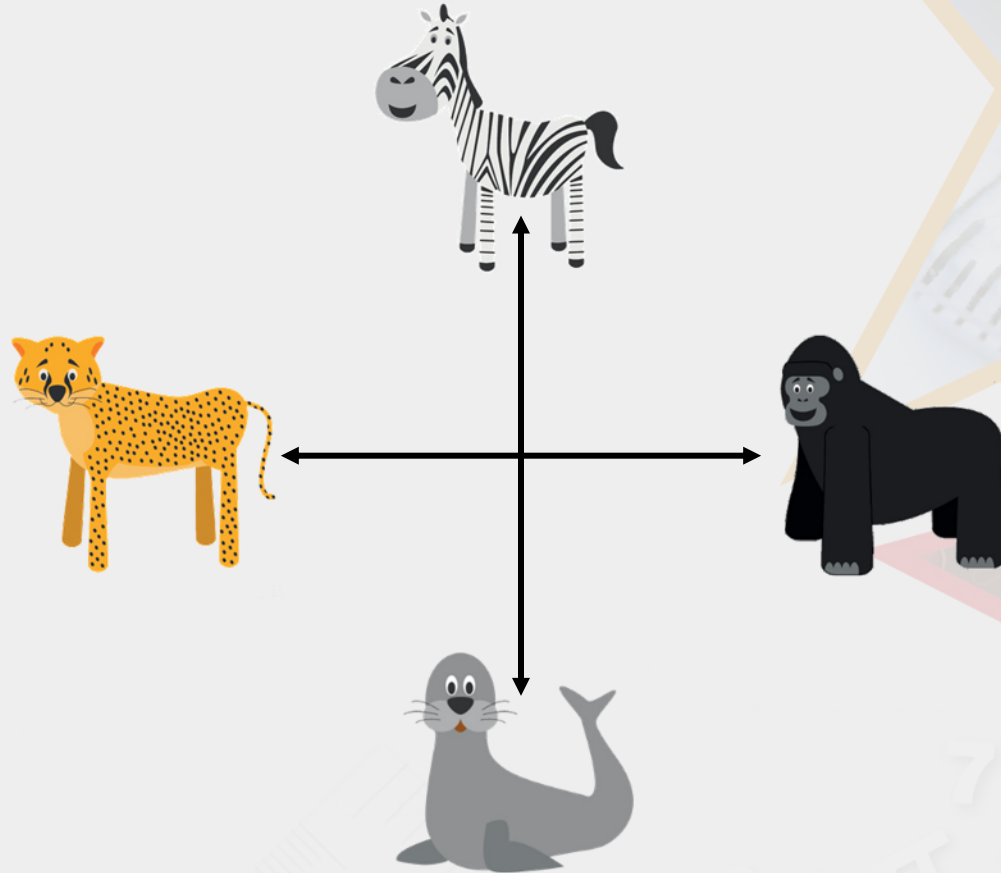
The shape has 6 angles that  
are the same size.

Draw the shape that he is thinking of.



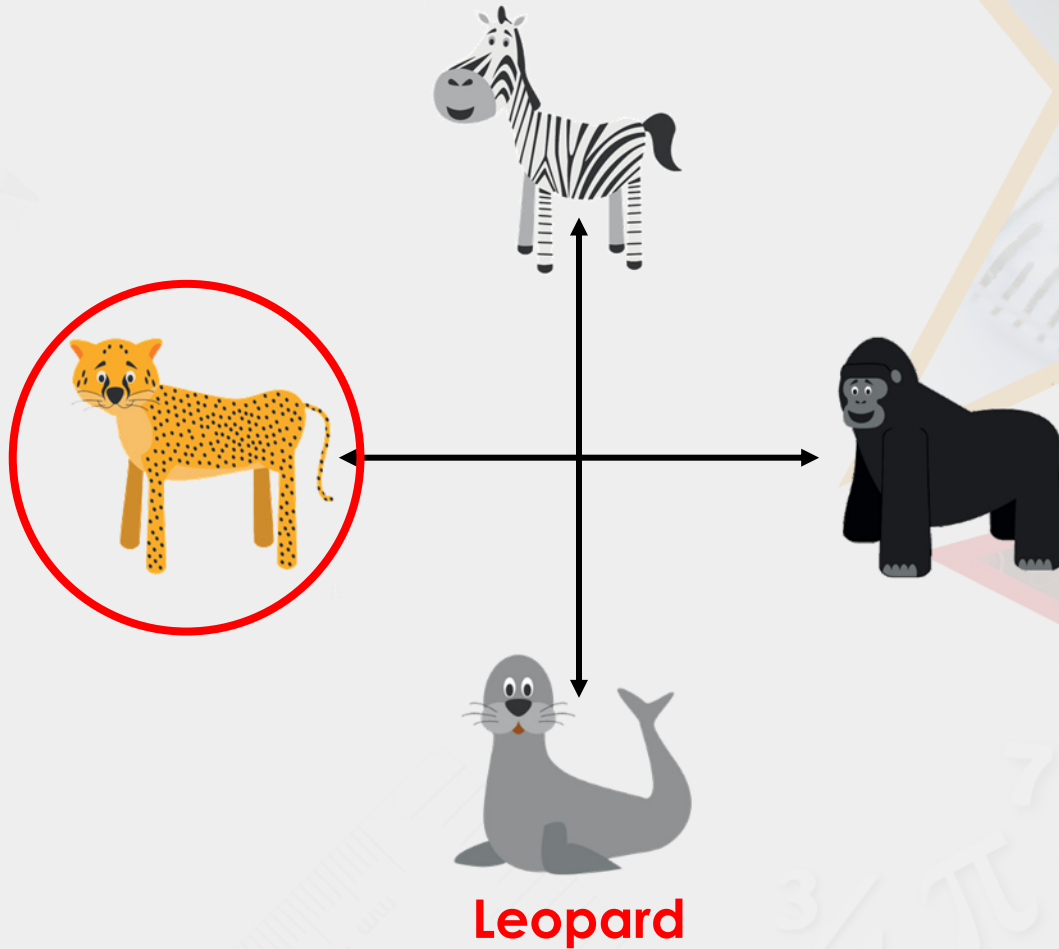
## Problem Solving 2

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



## Problem Solving 2

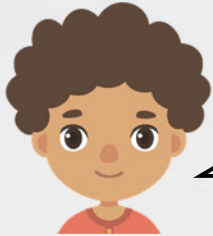
After a three quarter turn anti-clockwise, you are now facing the zebra. Which animal were you facing when you started?



## 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,

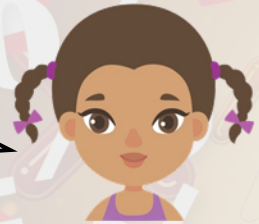


It has moved a half turn clockwise.



Fiona says,

It has moved a half turn anti-clockwise.



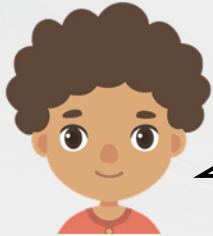
Who is correct? Explain how you know.

Both Jon and Fiona could be correct because...

## Reasoning 1

A compass needle has moved from south to north.

Jon says,

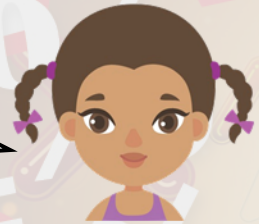


It has moved a half turn clockwise.



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.**