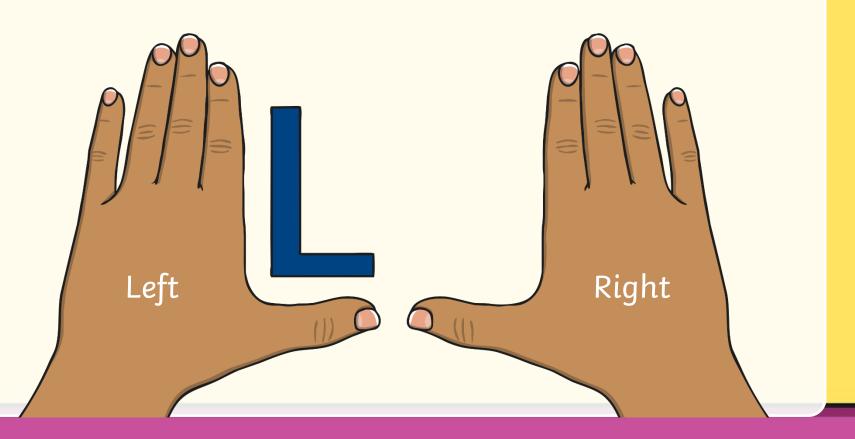


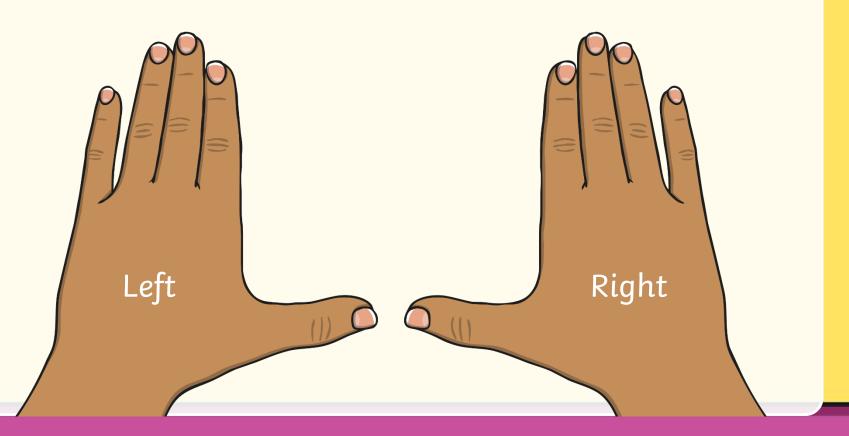
## Put your left hand in the air!

The hand that makes an 'L' shape is your left hand.



## Put your right hand in the air!

The hand that does not make an 'L' shape is your right hand.



## Making turns - clockwise

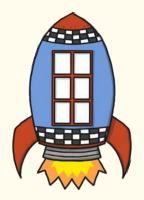


We call this one whole turn or a full turn.

If the frog turns to the **right**, it is turning **clockwise**.

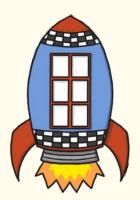


## Making turns – anti-clockwise



Anti means the opposite of.

If the rocket turns to the left, it is turning anti-clockwise.



### Making turns – a quarter turn clockwise



A quarter means there are 4 equal parts.

The kite might turn part of the whole turn.

The kite will turn **a quarter** of the whole turn **clockwise.** 



### Making turns – a quarter turn anti-clockwise



The bear turns 1 of the 4 equal parts.

The bear might turn part of the whole turn.

The bear will turn **a quarter** of the whole turn **anti-clockwise**.



## Making turns – a half turn clockwise



A half means there ae 2 equal parts.

The owl might turn part of the whole turn. The owl will turn **half** of the whole turn **clockwise.** 



## Making turns – a half turn anti-clockwise



Remember, turning left is anti-clockwise.

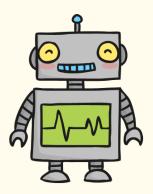
Turning right is clockwise

The bike might turn part of the whole turn.

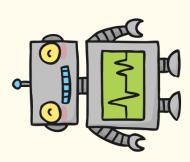
The bike will turn **half** of the whole turn **anti-clockwise.** 

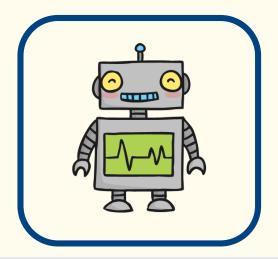


#### Here is a robot.

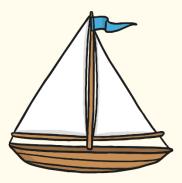


The robot has rotated 1 whole turn anticlockwise. Which picture shows the robot now?

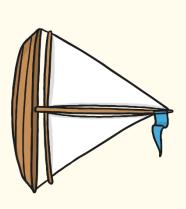


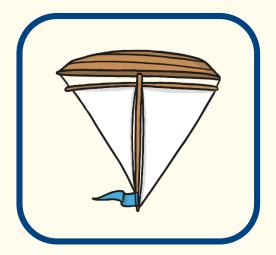


## Here is a toy boat.

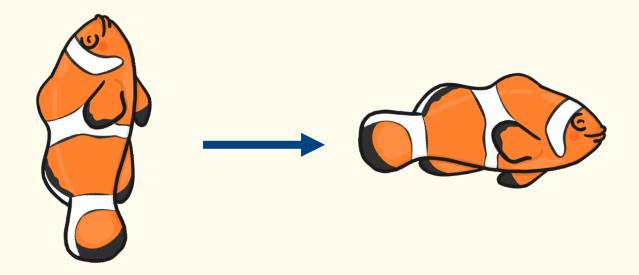


The boat has rotated a half turn clockwise. Which picture shows the boat now?





## How far has the fish rotated?



answer

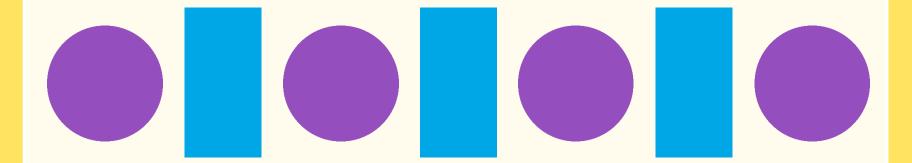
one quarter turn clockwise

## How far has the ladybird rotated?





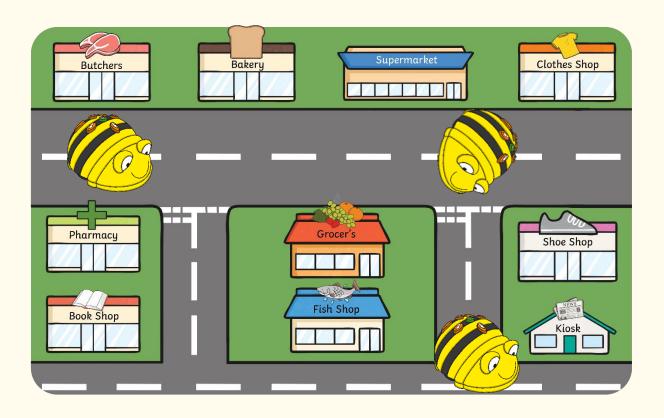
one half turn anticlockwise or one half turn clockwise Draw the next three shapes in the sequence.



Draw the next three shapes in the sequence.



## Bee-Bot wants to buy a newspaper How should he get to the Kiosk?





Go straight ahead, then turn right. Go straight ahead again, then turn left. Continue straight ahead. The Kiosk is on your left.

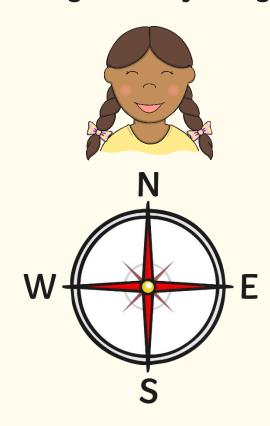
## Bee-Bot wants to buy some meat. How should he get to the Butcher's?





Go straight ahead, then turn left. Go straight ahead again, then turn left. Continue straight ahead. The Butchers is on your right.

# Selma was facing North. She did a three-quarter turn in a clockwise direction. Which way is she facing now?



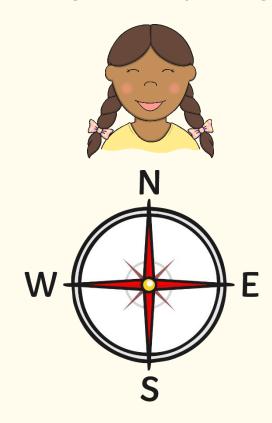
answer

Selma is facing West.

Selma was facing North.

She turned 90 degrees clockwise.

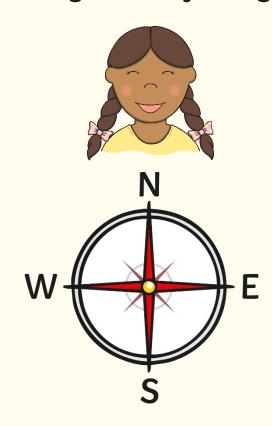
Which way is she facing now?



answer

Selma is facing East.

# Selma was facing North. She turned 90 degrees anticlockwise. Which way is she facing now?



answer

Selma is facing West.

