

Click here to learn more about position and direction


<https://www.bbc.co.uk/bitesize/clips/zy26sbk>


<https://www.bbc.co.uk/bitesize/clips/zf7xn39>

<https://www.bbc.co.uk/bitesize/clips/zdkwmp3>

Use the language forwards, backwards, up, down, left and right to describe movement in a straight line.

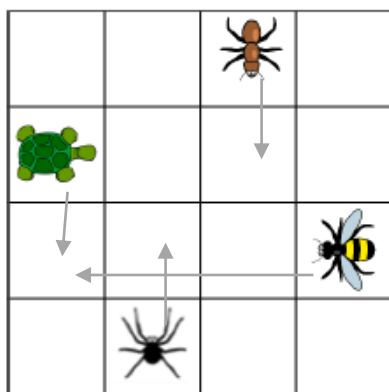
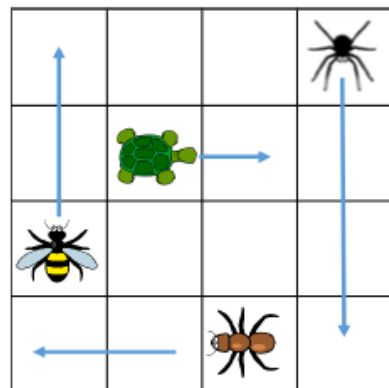
A

The  has moved 1 square right.

The  has moved 2 squares left.


The **bee** has moved 2 squares up.

The **spider** has moved 3 squares down.



Record these movements on the grid using arrows.

The  moves 1 square right.

The  moves 3 squares forward.

The  moves 1 square down.

The  moves 1 square up.

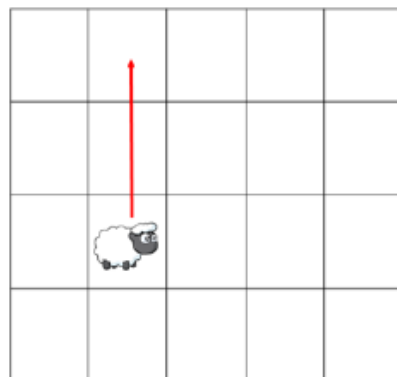
Is Amir correct? Explain your reasoning.

B



Amir

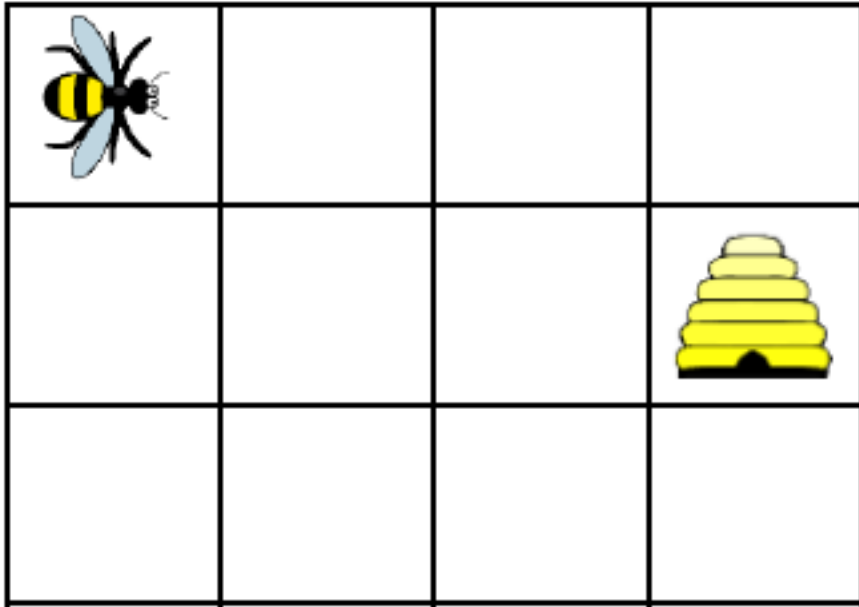
The sheep has moved 2 squares forward.



Amir is incorrect. The sheep has moved 2 squares to the left because of the way it was facing to begin with.

How many different routes can you write for the bee to get to the hive?  
Use the words forwards, backwards, left and right.

C



For example: **Forward 3, Right 1.**

Right 1, Forward 3.

Right 2, Forward 3, Left 1.

Forward 2, Right 1, Forward 1.

IAL: to use positional language

Work with a partner to describe turns using the language full turn, half turn, quarter turn, three-quarter turn, clockwise and anticlockwise.

A

Match the turn to the description



A full turn

A quarter turn clockwise

A half turn anticlockwise

Describe how the triangle has turned each time.



The triangle has made a half turn clockwise.



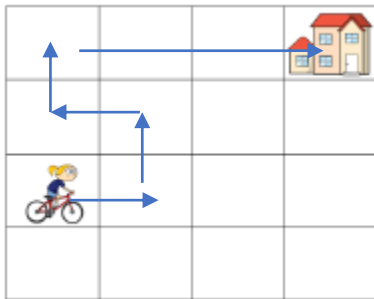
The triangle has made a quarter turn clockwise.



The triangle has made a quarter turn anticlockwise.

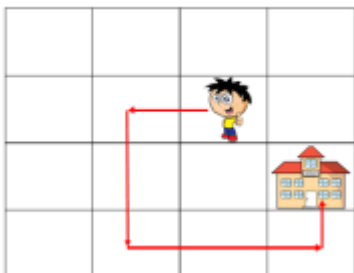
Draw the route to show these directions.

B



Forward 1 square. Turn left.  
 Forward 1 square, quarter turn anti-clockwise.  
 Forward 1 square. Make a quarter turn clockwise.  
 Forward 1 square. Make a three-quarter turn anti-clockwise. Forward 3 squares.

Describe the route that Dennis takes to school.



Forward 1 square. Turn a quarter turn anticlockwise.  
 Forward 2 squares. Turn a quarter turn anticlockwise.  
 Forward 2 squares. Turn a quarter turn anticlockwise.  
 Forward 1 square.

How many different routes can you find to get from start to finish?  
Use the language forward, backwards, clockwise, anti-clockwise and quarter turn.

C

			finish
	start		

For example: Turn a quarter anti-clockwise.  
Forward 1.  
Turn a quarter turn clockwise.  
Forward 2.  
Turn a quarter turn clockwise.  
Forward 3.

**Challenge:** Is Whitney correct? Convince me.



A quarter turn clockwise is the same as a three quarter turn anticlockwise.

Play these games

<https://pbskids.org/peg/games/hungry-pirates>

<http://jeux.lulu.pagesperso-orange.fr/html/anglais/flvoyage/fleches4.htm>

<https://www.bbc.co.uk/bitesize/clips/zjyb9j6>

### Positional Language

Forwards

backwards

up

down

left

right

full turn

half turn

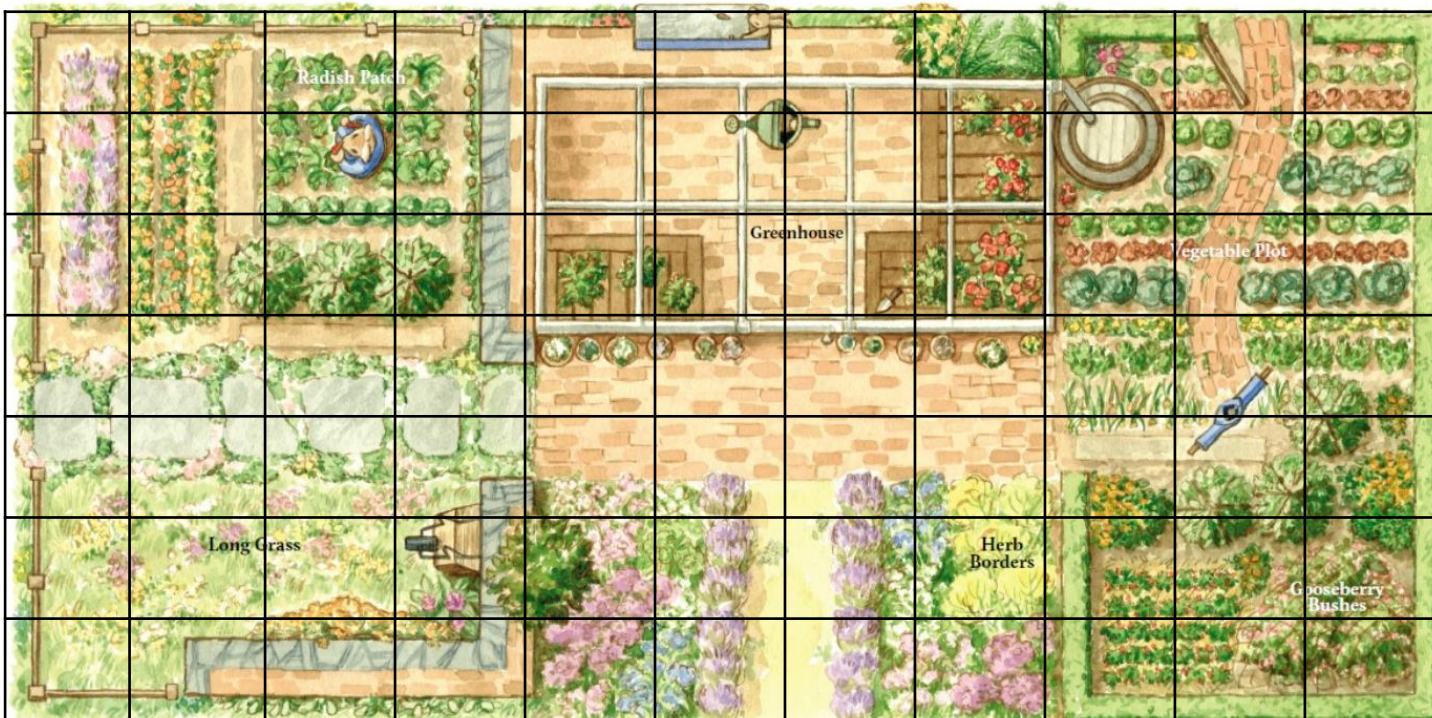
quarter turn

three-quarter turn

clockwise

anticlockwise

Here is a map of Mr. McGregor's garden.  
Follow these directions to move around the map.



1. Start in the **Radish Patch**. Go forward 1 square. Turn a **quarter turn anti-clockwise**. Go forward 4 squares. Turn a **quarter turn anti-clockwise**. Go forward 1 square. Where are you? Long grass

2. Start in the **Gooseberry Bushes**. Go forward 3 squares. Turn a **quarter turn anti-clockwise**. Go forward 5 squares. Turn a **quarter turn clockwise**. Go forward 1 square. What can you use to water the plants? Watering can

3. Start in the **Herb Borders**. Go forward 3 squares. Turn a **quarter turn clockwise**. Go forward 2 squares. Where are you? Vegetable Plot

Make up your own directions to move around the map.