



# Maths

Calculation Policy

*Position and direction*

2024

EYFS → page

Year One → page

Year Two → page

Year Three → page

Year Four → page

Year Five → page

Year Six → page

## EYFS

- I can understand position through words (no actions)
- I can describe a familiar route using in front and behind
- I can select, rotate and manipulate shapes in order to develop shape reasoning skills



## Year One and Two (Both taught in Year One) – could use BeeBots

- I can describe turns
  - Pupils make whole, half, quarter and three-quarter turns in both directions and connect turning clockwise with movement on a clock face.
- I can describe position (*left and right*)

Here are some shapes.



Use the words to complete the sentences.

left

right

- The circle is to the \_\_\_\_\_ of the square.
- The star is to the \_\_\_\_\_ of the triangle.

The circle moves 1 space to the left.

The square moves 3 spaces to the right.



- Where are the shapes now?

Draw them on the track.



- I can describe position (*forwards and backwards*)

Use the words to complete the sentences.

forwards

backwards

a)



Mo moves 3 squares \_\_\_\_\_

- I can describe position (*above and below*)

Colour the cubes to match the sentences.



- The top cube is blue.
- The bottom cube is red.
- The cube below the top one is green.
- The cube above the red one is yellow.
- The cube between the green and yellow cubes is purple.

- I can describe movement using positional language

Mo, Jo and Max are moving on a grid.

- a) Mo moves 2 squares forwards.  
Where does Mo end up?

- b) Jo moves 3 squares forwards and 2 squares left.  
Where does she end up?

- c) Max needs to get to the shop.  
How could he get there?

|                                                                                            |  |        |        |
|--------------------------------------------------------------------------------------------|--|--------|--------|
| <br>Max |  | cinema | school |
|                                                                                            |  |        |        |
| <br>Jo  |  |        |        |
| <br>Mo  |  | park   | shop   |

- I use ordinal numbers

Here are some objects.



- a) Circle the 1st object.  
b) Underline the 3rd object.  
c) Tick the 2nd object.

Here are some shapes.



Complete the sentences.

The 2nd shape is a \_\_\_\_\_

The 4th shape is a \_\_\_\_\_

The star is the  shape.

The square is the  shape.

- I can order and arrange combinations of mathematical objects in patterns and sequences

### Year Three and Four (Both taught in Year Three)

- I can describe turns
  - Pupils make whole, half, quarter and three-quarter turns in both directions and connect turning clockwise with movement on a clock face.
- I can describe position (*left and right*)
- I can describe position (*forwards and backwards*)
- I can describe position (*above and below*)
- I can describe movement using positional language
- I can understand coordinates and axis

Use the words to complete the sentences.

The first value in a pair of coordinates is the \_\_\_\_\_ value.

This is the value on the \_\_\_\_\_ axis.

The second value in a pair of coordinates is the \_\_\_\_\_ value.

This is the value on the \_\_\_\_\_ axis.

- I can describe position using coordinates  
First quadrant only

Some shapes are drawn on a grid.

a) Tommy, Dora and Eva are working out the coordinates of the pentagon.



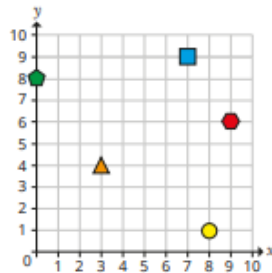
The coordinates of the pentagon are (0, 8).

Dora



The coordinates of the pentagon are (8, 0).

Tommy



I think you are both right!



Eva

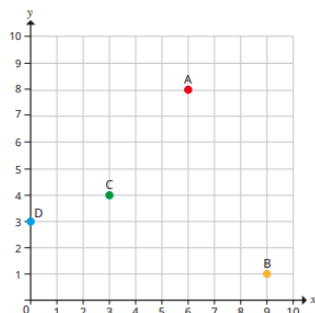
Who is correct?

- I can plot coordinates
- I can draw 2D shapes on a grid
- I can translate on a grid  
Translations of a given unit to the left/right and up/down
- I can describe translations of a grid
- I use ordinal numbers
- I can order and arrange combinations of mathematical objects in patterns and sequences

### Year Five and Six (Both taught in Year Five)

- I can understand coordinates and axis
- I can describe position using coordinates  
First quadrant only
- I can plot coordinates
- I can read and plot coordinates in the first quadrant

Four points are plotted on the coordinate grid.



a) Write the coordinates of each point.

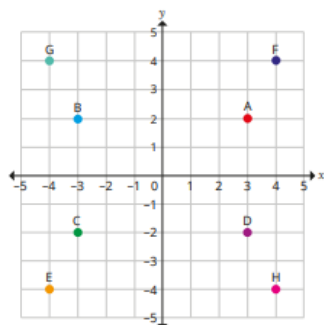
Points E, F, G and H have these coordinates.

E (7, 6)      F (2, 9)      G (10, 10)      H (5, 0)

b) Plot and label points E, F, G and H.

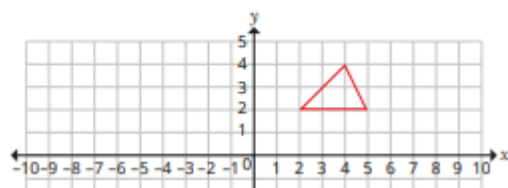
Which did you find the hardest to plot?

- I can read and plot coordinates in four quadrants



- I can draw 2D shapes on a grid
- I can translate on a grid  
Translations of a given unit to the left/right and up/down
- I can describe translations of a grid
- I can translate shapes using coordinates
- I can find the line of symmetry in a given shape
- I can use reflection using coordinates  
Reflections should be in lines that are parallel to the axes
- I can use reflection using shapes  
Reflections should be in lines that are parallel to the axes

Reflect the triangle in the y-axis.



- I can solve problems including all of the above