

## Year 4 Mathematics Homework – Position and Direction

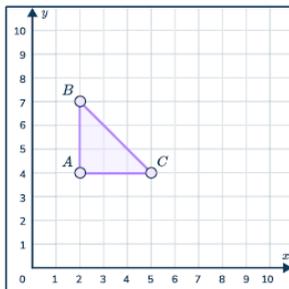
Tick your answer to each question, like in the example below. You can use any space left below or around a question for your working out, if you need it.

Example Question

$$1,435 + 2,870 =$$

- a  3,205
- b  4,305
- c  3,295
- d  5,110

Sophie draws a triangle on a grid.



Use the coordinate grid to answer questions 3 and 4.

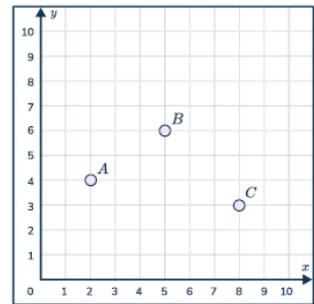
3 What are the coordinates of point B?

- a  (2, 4)
- b  (2, 7)
- c  (5, 4)
- d  (7, 2)

4 What are the coordinates of point C?

- a  (4, 5)
- b  (2, 4)
- c  (6, 5)
- d  (5, 4)

Sam marks some points on a treasure map.



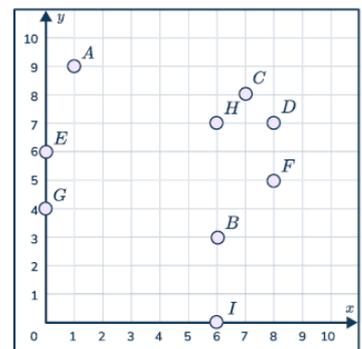
Use the map to answer questions 1 and 2.

1 What are the coordinates of point C?

- a  (3, 8)
- b  (2, 4)
- c  (5, 6)
- d  (8, 3)

2 What are the coordinates of point A?

- a  (5, 6)
- b  (2, 4)
- c  (3, 5)
- d  (4, 2)



Use the coordinate grid to answer questions 5 to 9.

5 Which point has the coordinates of (8, 7)?

- a  Point D
- b  Point C
- c  Point F
- d  Point H

6 Which point has the coordinates of (0, 6)?

- a  Point I
- b  Point B
- c  Point E
- d  Point G

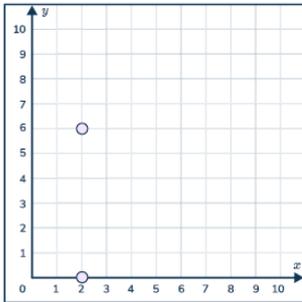
7 What point has the coordinates of (6, 3)?

- a  Point E
- b  Point B
- c  Point I
- d  Point A

8 Points B, D and H are three vertices of a rectangle. What is the fourth point of the rectangle?

- a  (8, 5)
- b  (8, 3)
- c  (8, 4)
- d  (3, 8)

11 Lizzie starts to plot an equilateral triangle on a grid. What are the coordinates of the missing point?



- a  (8, 3)
- b  (3, 7)
- c  (7, 3)
- d  (9, 3)

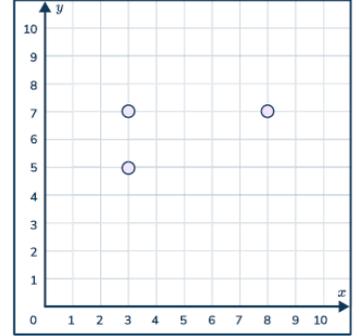
12 Three vertices of a square have the coordinates of (4, 9), (7, 9) and (7, 6). What are the coordinates of the final vertex?

- a  (4, 7)
- b  (9, 7)
- c  (4, 6)
- d  There is not enough information to find the final coordinate.

9 Points E and G are two vertices of a right-angled triangle. What is the third point of the triangle?

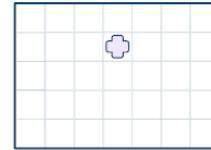
- a  (3, 6)
- b  (2, 5)
- c  (2, 3)
- d  (0, 3)

10 Leila begins to plot a rectangle on a grid. What are the missing coordinates needed for Leila to complete her rectangle?



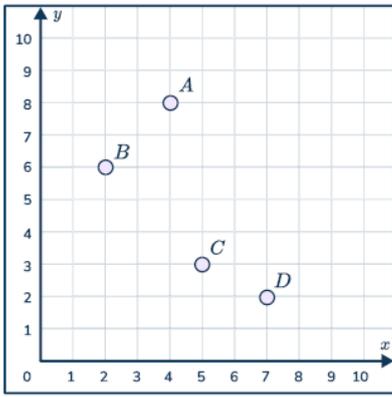
- a  (3, 5)
- b  (8, 5)
- c  (5, 8)
- d  (8, 2)

13 Tom has a shape on a grid:



He moves it three units to the right and one unit down. Which diagram shows the new position of Tom's shape?

- a
- b
- c
- d

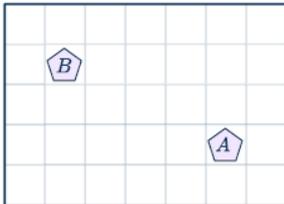


Use this coordinate grid to answer questions 14 to 16.

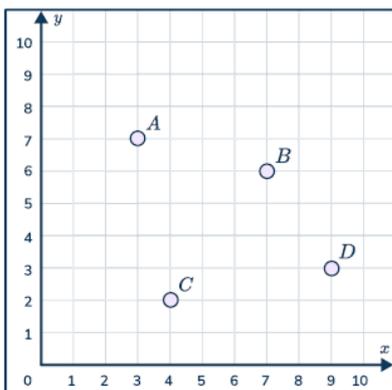
- 14 Point C is translated 3 units left and 3 units up.  
What are the coordinates of the translated point?

- a  (2, 6)  
b  (6, 2)  
c  (8, 6)  
d  (4, 5)

- 17 A shape starts in position A.  
It is translated to position B.  
Which of the following describes the translation?



- a  2 down units and 4 right units  
b  2 up units and 4 left units  
c  2 up units and 4 right units  
d  3 up units and 5 left units



Use the coordinate grid to answer questions 18 to 20.

- 15 Point D is translated 3 units left and 1 unit up.  
What are the coordinates of the translated point?

- a  (3, 4)  
b  (10, 3)  
c  (2, 4)  
d  (4, 3)

- 16 Translate point A 2 units right and 4 units down.  
What are the coordinates of the translated point?

- a  (2, 4)  
b  (5, 5)  
c  (6, 4)  
d  (4, 2)

- 18 Describe the translation of point A to point C.

- a  1 unit left and 5 units up  
b  1 unit right and 5 units down  
c  2 units right and 6 units down  
d  1 unit left and 5 units down

- 19 Describe the translation of point D to point B.

- a  2 units right and 3 units up  
b  3 units left and 2 units up  
c  2 units right and 3 units down  
d  2 units left and 3 units up

- 20 Describe the translation of point C to point B.

- a  3 units right and 4 units up  
b  4 units right and 5 units up  
c  3 units left and 4 units down  
d  3 units left and 4 units up