

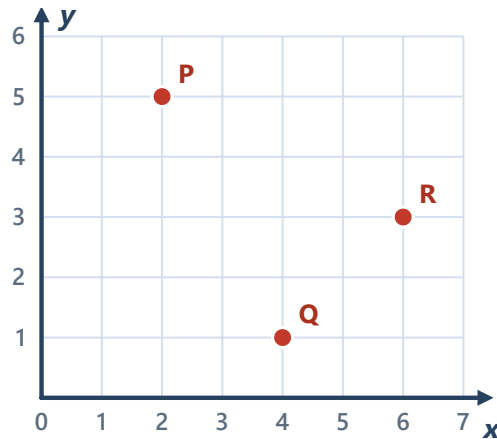
Year 4 Coordinates and Translation: check-up and SATs-style questions: answers

Year 4 - Coordinates and Translation - Test yourself

Answers. Final answers to the worksheet questions. Full step-by-step solutions for every question are free at websink.site/ks2-sats/maths/year-4/ch10-position-direction/check-up-and-sats-style-questions/

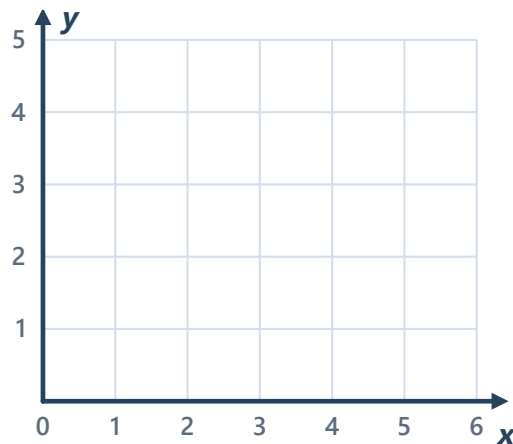
Exercise 10Z Check-up (non-calculator) Non-calculator

- 1 Write the coordinates of the point **P**.



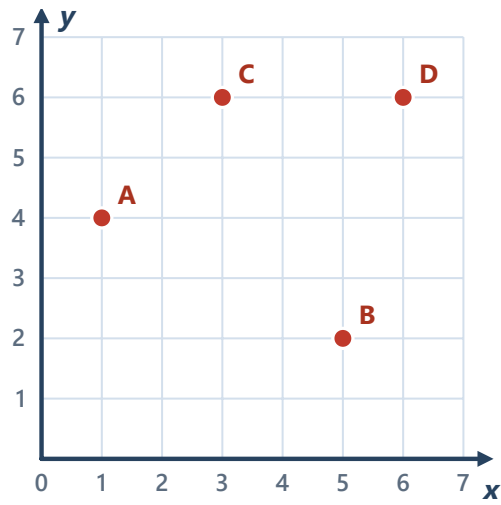
Answer: (2, 5)

- 2 Plot the point **A (4, 3)** on the grid.



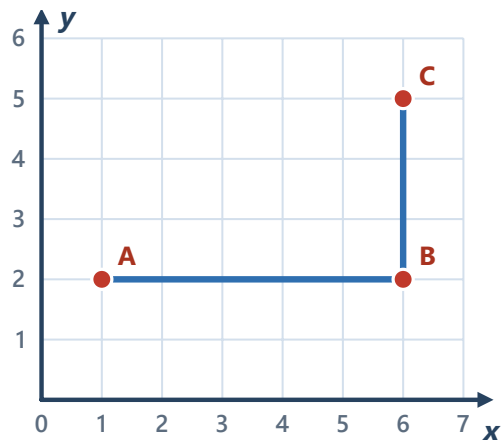
Answer: A is 4 along and 3 up

- 3 Which letter is at the point **(5, 2)**?



Answer: B

- 4 A, B and C are three corners of a rectangle: A (1, 2), B (6, 2) and C (6, 5). Find the coordinates of D.

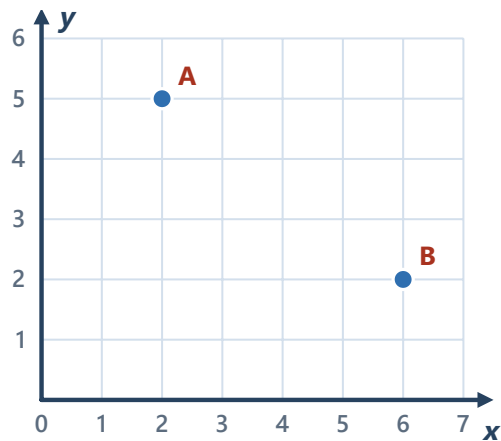


Answer: (1, 5)

- 5 The point A (3, 4) is translated 2 right and 3 up. What are the coordinates of A'?

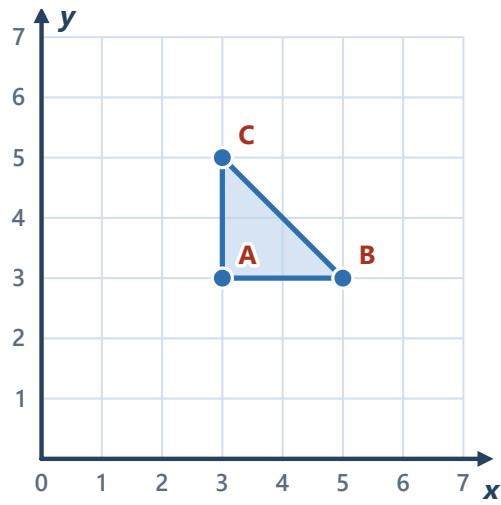
Answer: (5, 7)

- 6 Describe the translation from A (2, 5) to B (6, 2).



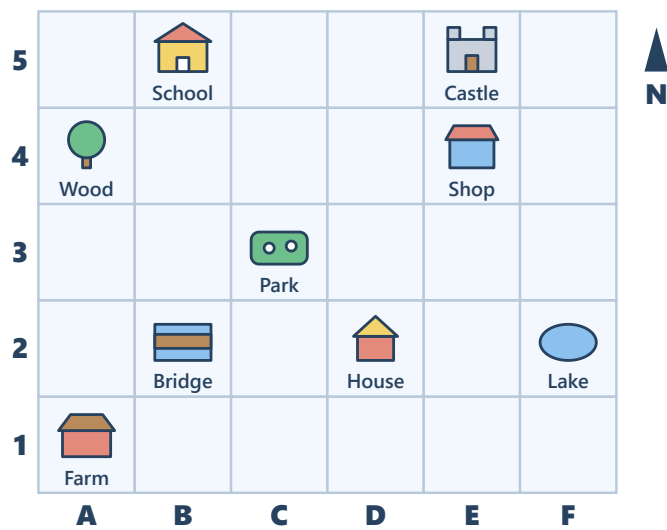
Answer: 4 right, 3 down

- 7 Triangle ABC has corners A (3, 3), B (5, 3) and C (3, 5). It is translated 2 left and 1 down. Write the coordinates of the new corners.



Answer: A' (1, 2); B' (3, 2); C' (1, 4)

8 What is the grid reference of the shop?

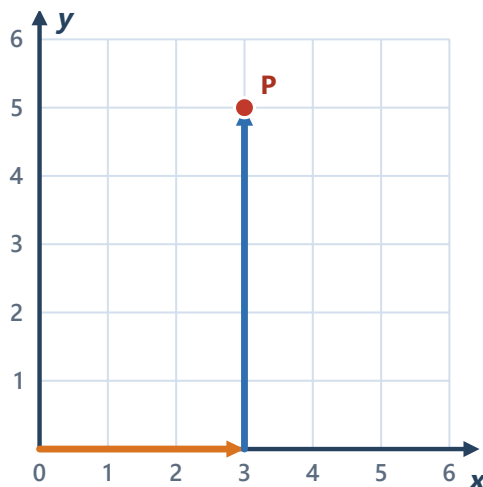


Answer: E4

9 A robot starts at (2, 1) facing north. It follows this program: F2 R F3. Where does it finish?

Answer: (5, 3), facing east

10 Ben says the coordinates of P are (5, 3). Is he right? Explain how you know.



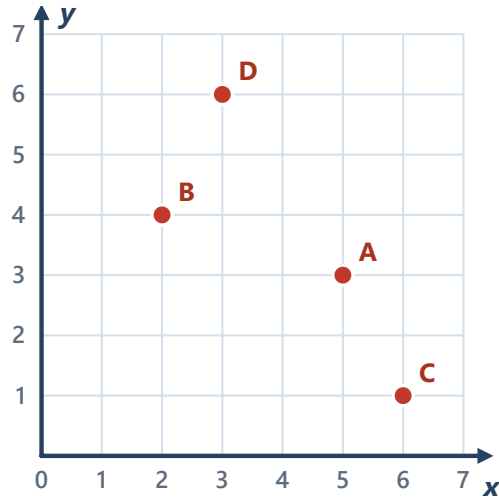
Answer: No. P is (3, 5)

Exercise 10X SATs-style questions

Non-calculator

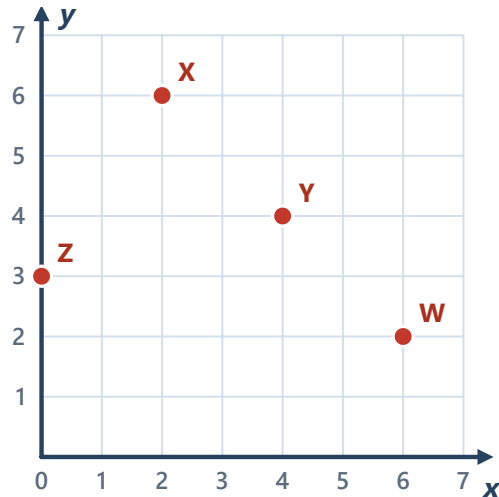
- 1 Write the coordinates of the point **A**.

[1 mark]

**Answer:** (5, 3)

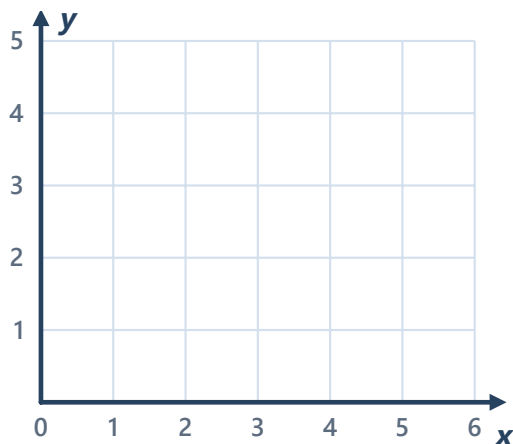
- 2 Which point has the coordinates **(2, 6)**? Write the letter.

[1 mark]

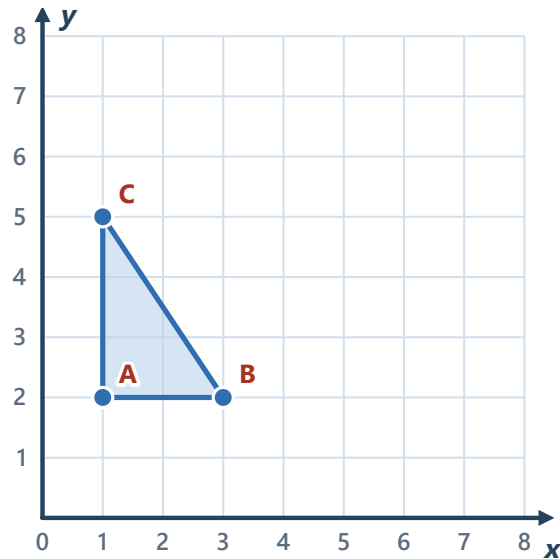
**Answer:** X

- 3 On the grid, plot A (1, 1), B (4, 1) and C (4, 3). Plot D so that ABCD is a rectangle. Join the points. Write the coordinates of D.

[2 marks]

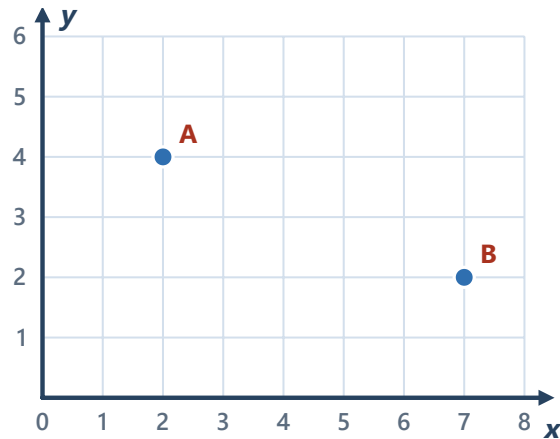
**Answer:** (1, 3)

- 4 Triangle ABC has corners A (1, 2), B (3, 2) and C (1, 5). It is translated 3 right and 2 up. Write the coordinates of A', B' and C'. [2 marks]



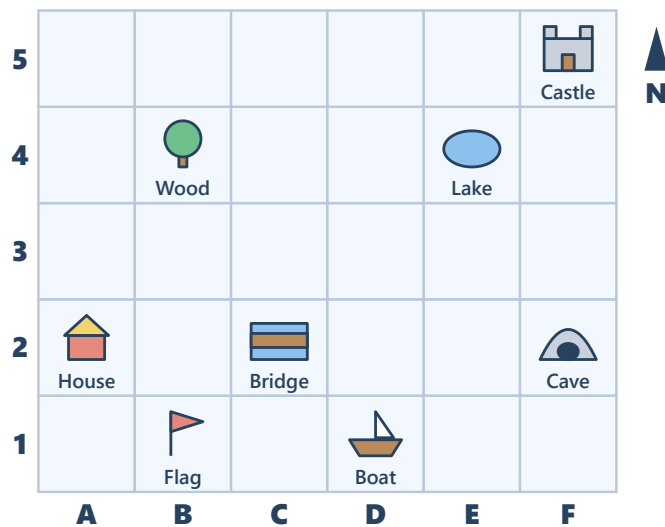
Answer: A' (4, 4); B' (6, 4); C' (4, 7)

- 5 Describe the translation that takes A (2, 4) to B (7, 2). [1 mark]



Answer: 5 right, 2 down

- 6 Look at the map of the island. [2 marks]



(a) What is the grid reference of the lake?

Answer: E4

(b) In which direction is the lake from the castle? Use a compass point.

Answer: south-west (SW)

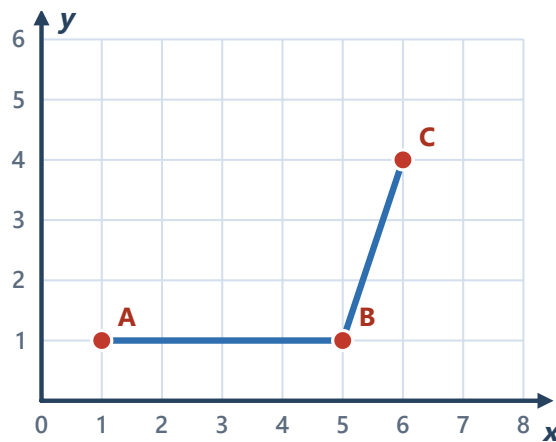
- 7 A robot starts at (3, 2) facing east. It follows this program: F2 L F3 L F4. (a) Where does the robot finish?
(b) Which way is it facing? [2 marks]

Answer: (1, 5), facing west

- 8 Amira says, "The point (4, 0) is on the y-axis." Is she correct? Explain how you know. [2 marks]

Answer: No. It is on the x-axis because $y = 0$

- 9 A (1, 1), B (5, 1) and C (6, 4) are three corners of a parallelogram ABCD. (a) Find the coordinates of D. (b) Describe the translation that takes A to B. [3 marks]



Answer: (a) (2, 4) (b) 4 right

- 10 A map says: "Start at (2, 3). Go 4 steps east, then 2 steps north, then 3 steps west." (a) Where is the treasure?
(b) What **one** translation takes the start to the treasure? [3 marks]

Answer: (a) (3, 5) (b) 1 right, 2 up