

Year 4: Missing corners and missing numbers: answers

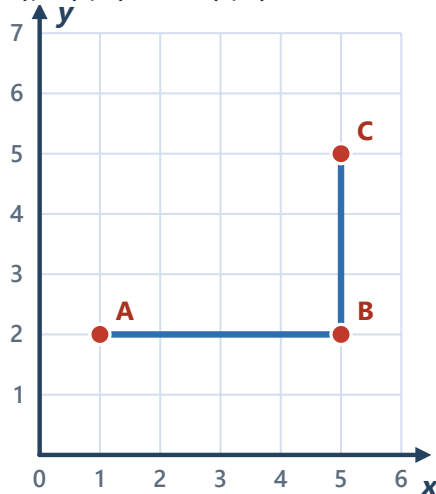
Year 4 - Coordinates and Translation - Lesson 10.3

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/missing-corners-and-missing-numbers/

Exercise 10C Finding missing corners and missing numbers

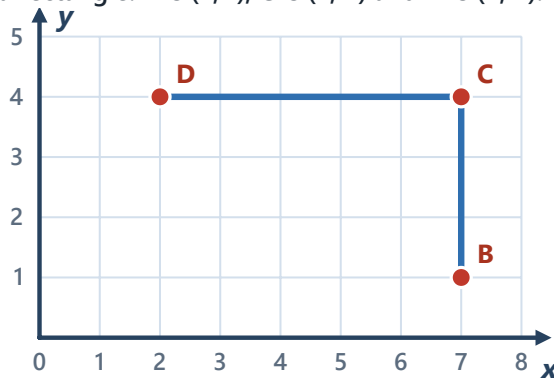
Non-calculator

- 1 Three corners of a rectangle are A (1, 2), B (5, 2) and C (5, 5). Find the fourth corner, D.



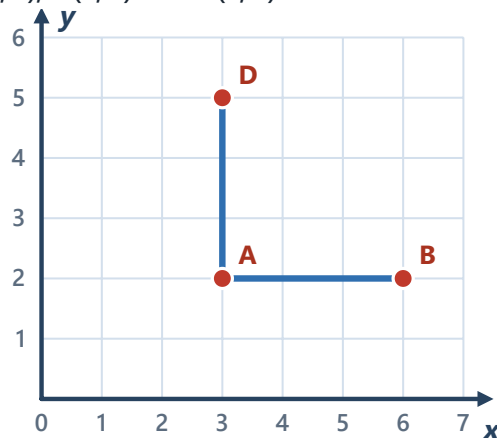
Answer: (1, 5)

- 2 B, C and D are three corners of a rectangle. B is (7, 1), C is (7, 4) and D is (2, 4). Find the coordinates of A.



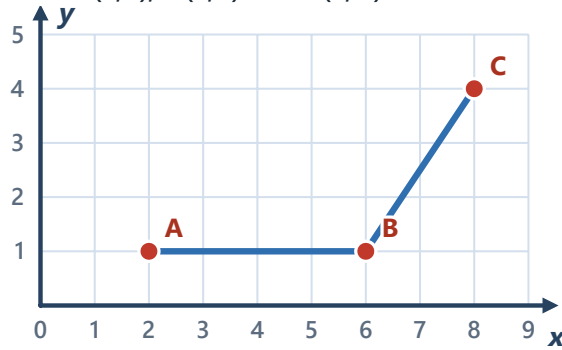
Answer: (2, 1)

- 3 Three corners of a square are A (3, 2), B (6, 2) and D (3, 5). Find the coordinates of C.



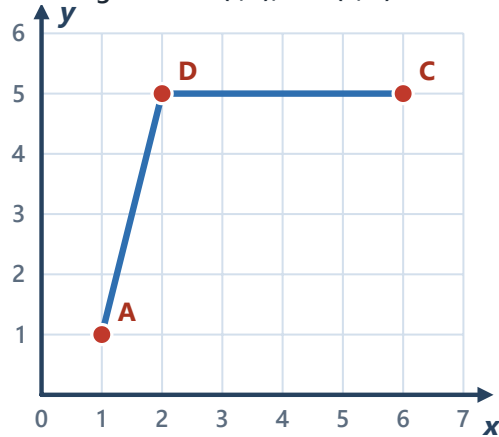
Answer: (6, 5)

- 4 Three corners of a parallelogram are A (2, 1), B (6, 1) and C (8, 4). Find the fourth corner, D.



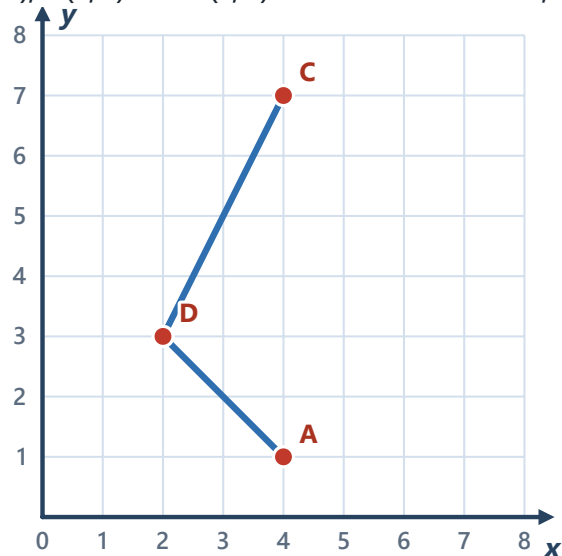
Answer: (4, 4)

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



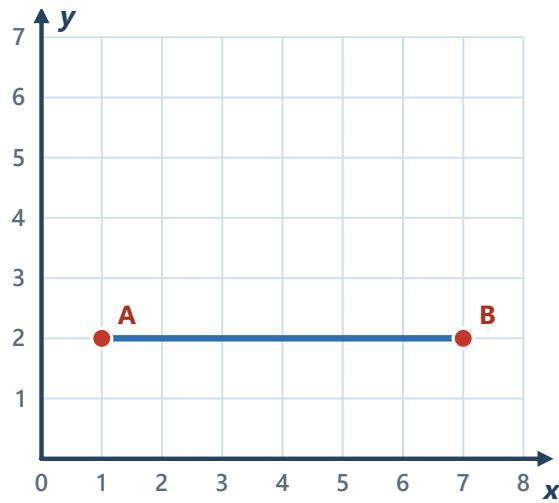
Answer: (5, 1)

- 6 Three corners of a kite are A (4, 1), C (4, 7) and D (2, 3). Find the fourth corner, B.



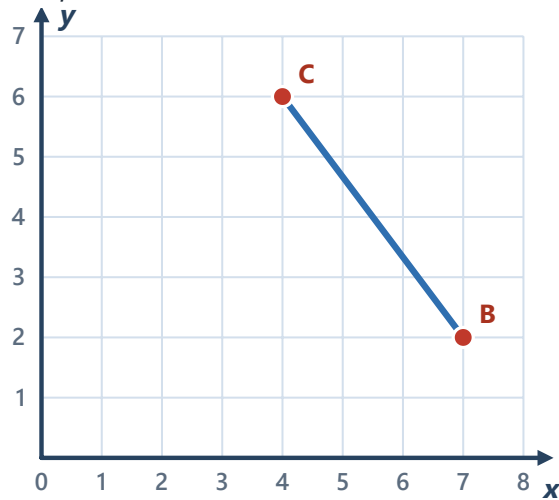
Answer: (6, 3)

- 7 Two corners of an isosceles triangle are A (1, 2) and B (7, 2). The third corner C is 6 up from the x-axis. Find the coordinates of C.



Answer: (4, 6)

- 8 An isosceles triangle has its top corner C at (4, 6) and a base corner B at (7, 2). The base is flat. Find the coordinates of the other base corner, A.



Answer: (1, 2)

- 9 Find the missing number in each pair of points.

(a) P (3, 4) and Q (8, ?) are on a horizontal line. Write the missing number.

Answer: 4

(b) P (6, ?) and Q (1, 7) are on a horizontal line. Write the missing number.

Answer: 7

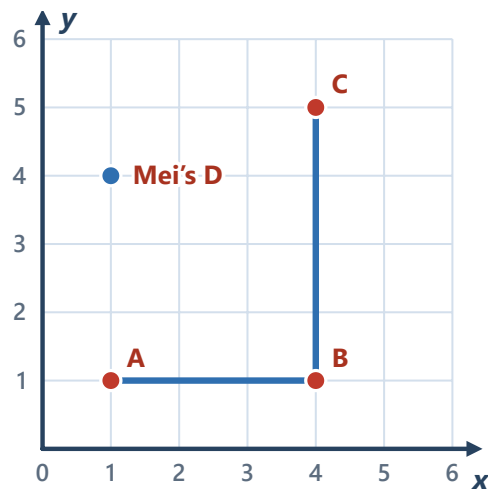
(c) P (5, 2) and Q (?, 8) are on a vertical line. Write the missing number.

Answer: 5

(d) P (?, 6) and Q (9, 1) are on a vertical line. Write the missing number.

Answer: 9

- 10 Mei has plotted A (1, 1), B (4, 1) and C (4, 5). She wants to make a rectangle. She says the fourth corner, D, is (1, 4). Is Mei right? Explain.



Answer: No. D is (1, 5)

11 Write **always**, **sometimes** or **never** for each sentence.

(a)

The missing corner of a rectangle has the same x-coordinate as one known corner and the same y-coordinate as another known corner.

Answer: Always

(b)

The missing corner of a parallelogram is straight above one of the other corners.

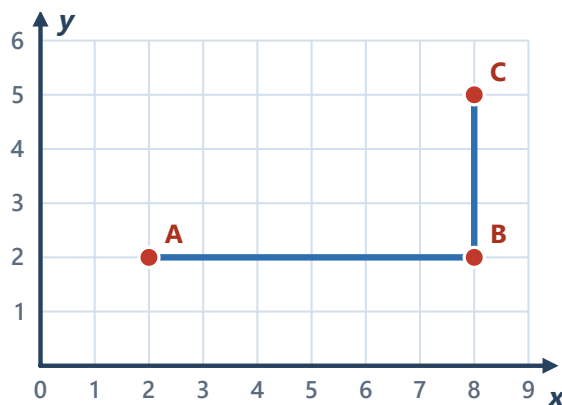
Answer: Sometimes

(c)

Two points on a vertical line have the same x-coordinate.

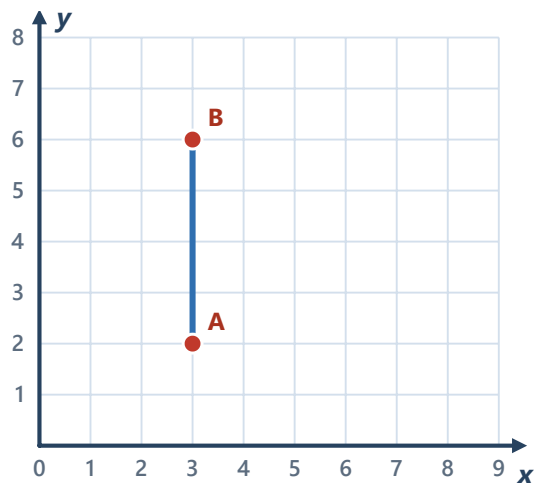
Answer: Always

12 Three corners of a rectangle are A (2, 2), B (8, 2) and C (8, 5). Each grid square is 1 cm. Find the fourth corner D. Then find the perimeter of the rectangle.



Answer: D = (2, 5); perimeter 18 cm

13 A (3, 2) and B (3, 6) are two corners of a square. The other two corners are on the right of AB. Find the coordinates of the other two corners.



Answer: (7, 6) and (7, 2)