

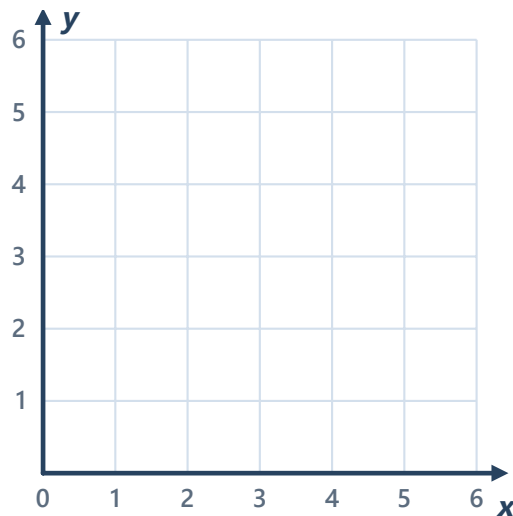
Year 4: Plotting points and drawing shapes: answers

Year 4 - Coordinates and Translation - Lesson 10.2

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/plotting-points-and-drawing-shapes/

Exercise 10B Plotting points and drawing shapes Non-calculator

- 1 Plot each point on the grid. Label it with its letter.



- (a) A (2, 4)

Answer: A is (2, 4)

- (b) B (5, 1)

Answer: B is (5, 1)

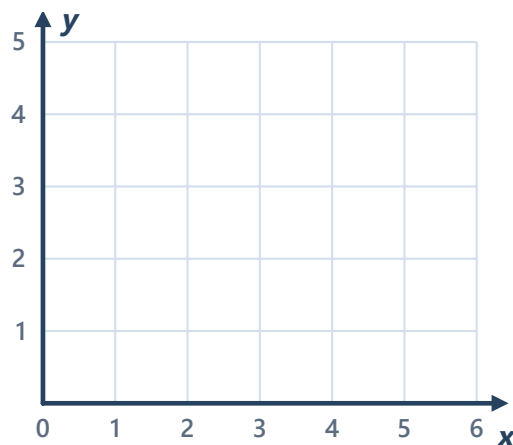
- (c) C (0, 3)

Answer: C is (0, 3)

- (d) D (6, 6)

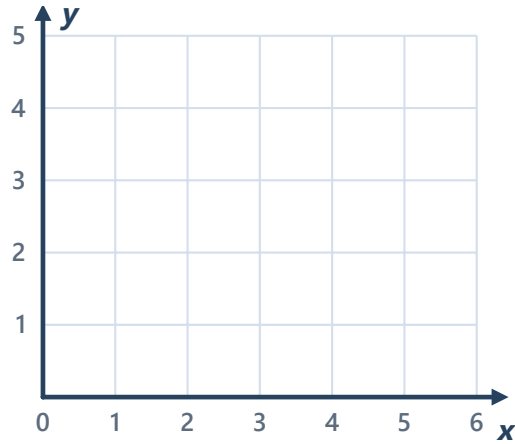
Answer: D is (6, 6)

- 2 Plot the points A (1, 1), B (5, 1), C (5, 4) and D (1, 4). Join them in order and join D back to A. What shape have you drawn?



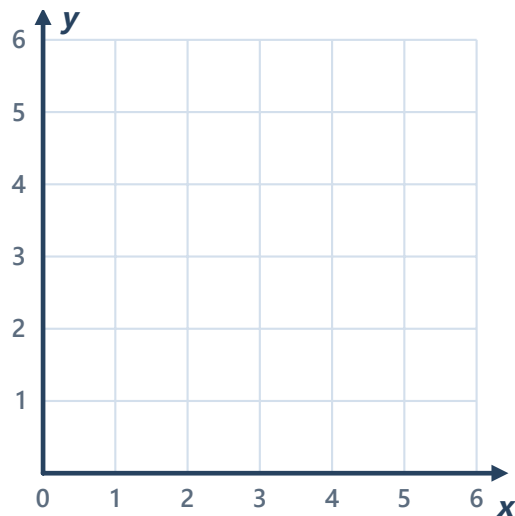
Answer: rectangle

- 3 Plot P (1, 1), Q (5, 1) and R (1, 4). Join them in order and join R back to P. What shape have you drawn?



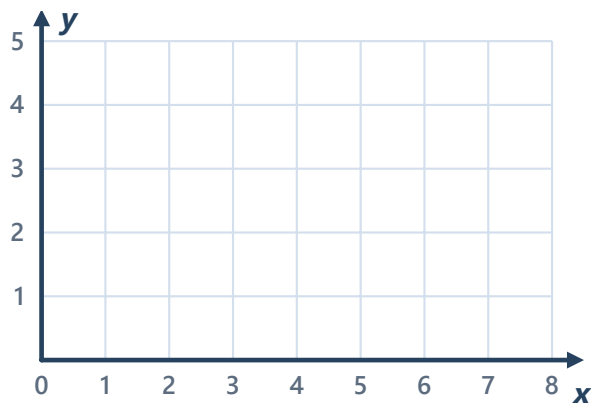
Answer: right-angled triangle

- 4 Plot A (2, 2), B (5, 2), C (5, 5) and D (2, 5). Join them in order. What is the name of the shape?



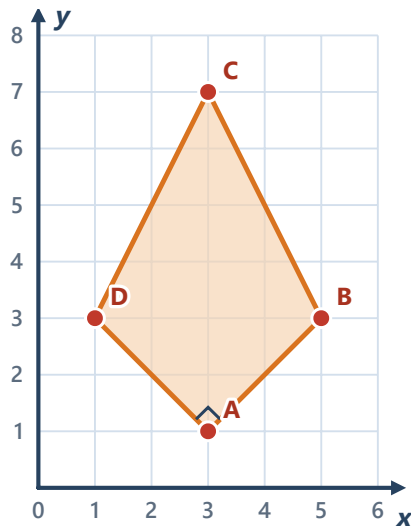
Answer: square

- 5 Plot A (1, 1), B (5, 1), C (7, 4) and D (3, 4). Join them in order. What is the name of the shape? (Hint: look at the two pairs of sides that slant the same way.)



Answer: parallelogram

- 6 Look at the shape on the grid.



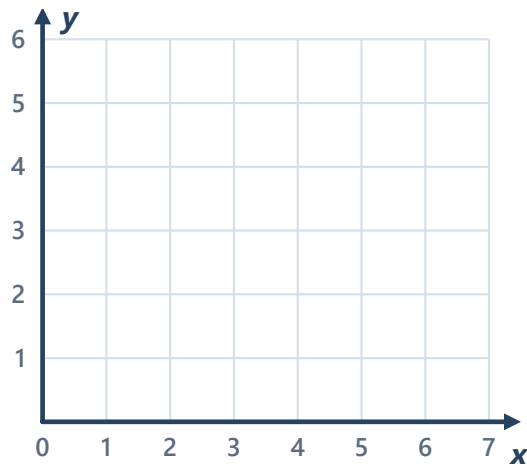
- (a) Write the coordinates of A, B, C and D.

Answer: A (3, 1); B (5, 3); C (3, 7); D (1, 3)

- (b) What is the name of the shape?

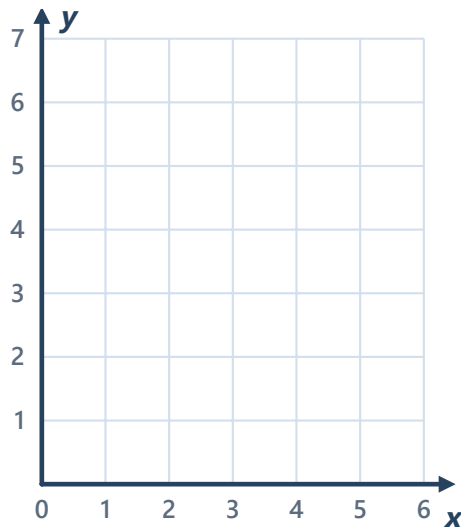
Answer: kite

- 7 Plot A (2, 1), B (6, 1) and C (4, 5). Join them in order and close the shape. What is the name of the triangle? (Two sides slant the same amount.)



Answer: isosceles triangle

- 8 Plot A (1, 1), B (5, 1), C (5, 2), D (2, 2), E (2, 6) and F (1, 6). Join them in order and close the shape. It looks like a letter. Which letter is it? How many sides has it got?



Answer: The letter L. It has 6 sides

9 What do all the points on each line have in common?

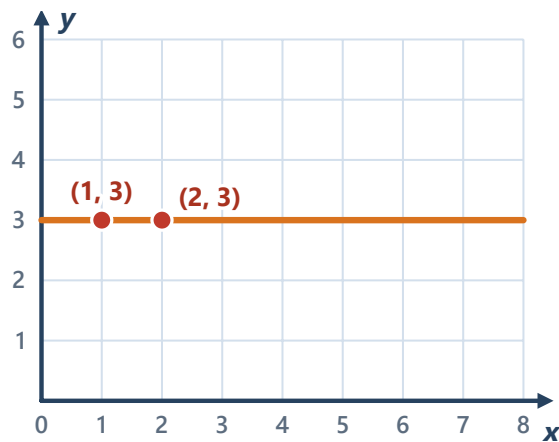
(a) The points (1, 6), (3, 6), (5, 6) and (8, 6) are on a line.

Answer: They all have $y = 6$ (a horizontal line)

(b) The points (2, 1), (2, 4) and (2, 7) are on a line.

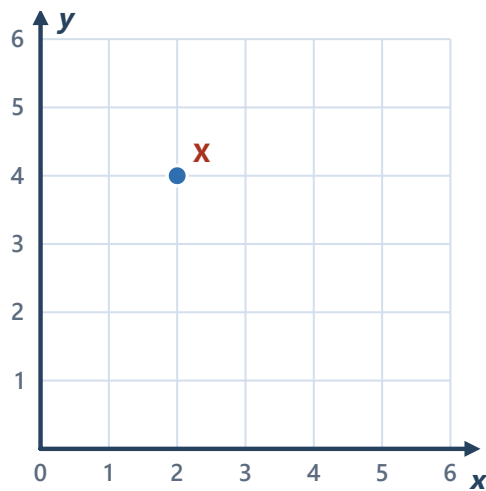
Answer: They all have $x = 2$ (a vertical line)

10 The points (1, 3) and (2, 3) are on a horizontal line. Write the coordinates of two more points on the same line.



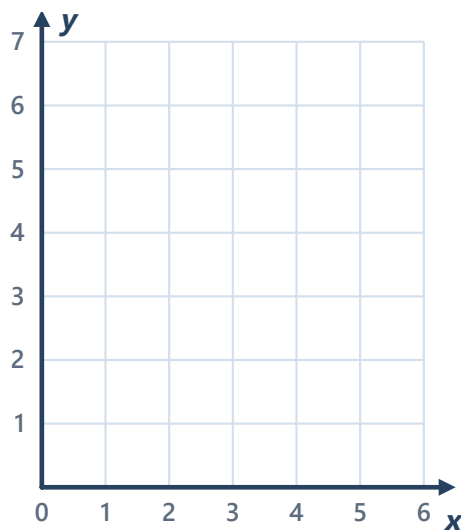
Answer: Any two points with $y = 3$, for example (4, 3) and (7, 3)

11 Ravi has been asked to plot (4, 2). He puts a cross at X. What mistake has he made?



Answer: He went 2 along and 4 up. He should go 4 along and 2 up

- 12** Jack plots A (1, 2), B (4, 2), C (4, 6) and D (1, 6) and joins them in order. He says, "I have drawn a square." Is Jack right? Explain how you know.



Answer: No. It is a rectangle (sides 3 and 4)

- 13** Write **always**, **sometimes** or **never** for each sentence.

- (a) Points with the same y-coordinate are on a horizontal line.

Answer: Always

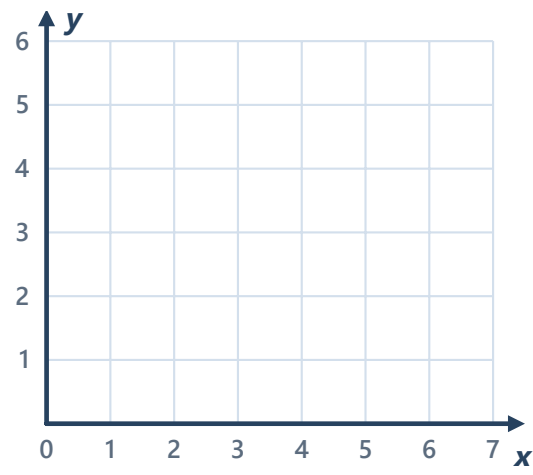
- (b) A shape drawn on a grid with four right angles is a square.

Answer: Sometimes

- (c) The points (1, 2), (2, 3) and (3, 4) are on a horizontal line.

Answer: Never

- 14** Plot A (2, 1), B (6, 1), C (6, 4) and D (2, 4) and join them to make a rectangle. Each side of a grid square is 1 cm long. What is the perimeter of the rectangle?



Answer: 14 cm