

Plotting points in the first quadrant

MODULE 8 · LOCATION, TRANSFORMATIONS AND SCALE SHAPE & SPACE

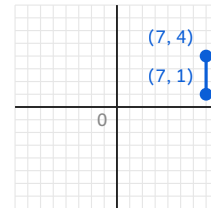
HOW TO ANSWER TODAY

- **Distance on an axis.** If the two points share x or y, subtract the OTHER coordinates. Answer is in units.
- **Quadrants.** Q1 is top-right; numbering goes ANTICLOCKWISE. A point on an axis is on the axis, not in a quadrant.

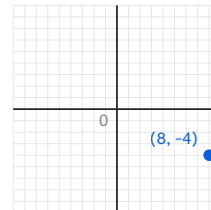
(3, 5) → Q1 · (-2, 1) → Q2 · (0, 4) → on the y-axis

★ STRETCH PROBLEMS

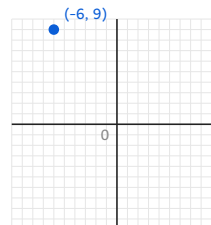
- 1 5th class are doing a treasure hunt in the school yard using a grid map. The first clue is buried at (7, 1) and the second clue is buried at (7, 4). How many squares apart are the two clues?



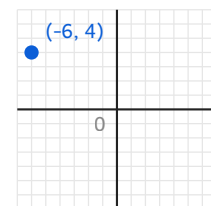
- 2 Saoirse maps the school orchard on a grid, with the old oak at the centre as the origin. She marks an apple tree at the point (8, -4). Which quadrant of the grid contains the apple tree?



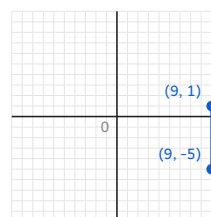
- 3 Mr Ó Sé draws a coordinate map of the school grounds for sports day, with the flagpole at the origin. The first-aid tent is marked at the point (-6, 9). Which quadrant of the map contains the first-aid tent?



- 4 Oisín draws a plan of the school yard on grid paper, with the flagpole at the origin. He marks the basketball hoop at the point (-6, 4). Which quadrant of the grid is the basketball hoop in?



- 5 In an art-and-maths lesson, Oisín draws a treasure map on a coordinate grid. The palm tree is at (9, 1) and the buried chest is at (9, -5). What is the distance between the palm tree and the chest on the grid?



SHAPE & SPACE