

Plotting and reading points with negative co-ordinates

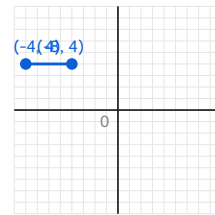
MODULE 8 · LOCATION, TRANSFORMATIONS AND SCALE SHAPE & SPACE

HOW TO ANSWER TODAY

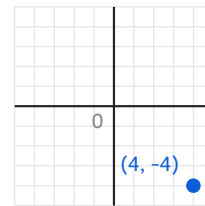
- **Distance on an axis.** If the two points share x or y, subtract the OTHER coordinates. Answer is in units.
(2, 5) and (2, 9) share $x=2 \rightarrow 9 - 5 = 4$ units
- **Quadrants.** Q1 is top-right; numbering goes ANTICLOCKWISE. A point on an axis is on the axis, not in a quadrant.
(3, 5) $\rightarrow$ Q1 $\cdot$ (-2, 1) $\rightarrow$ Q2 $\cdot$ (0, 4) $\rightarrow$ on the y-axis

★ STRETCH PROBLEMS

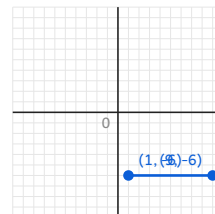
- 1 5th class are mapping the school garden on grid paper, where each unit is one metre. Niamh marks two sunflower seedlings at the points $(-4, 4)$ and $(-8, 4)$. What is the distance between the two seedlings?



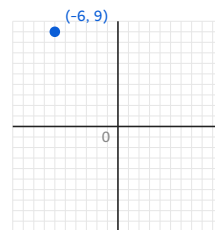
- 2 Cian draws a plan of the school yard on grid paper, with the flagpole at the origin. He marks the bike shed at the point $(4, -4)$. Which quadrant of the grid does the bike shed lie in?



- 3 Tadhg draws a coordinate map of his Cumann na mBunscol pitch. He marks two cones along the sideline at $(9, -6)$ and $(1, -6)$. How many units apart are the two cones?



- 4 Saoirse is mapping the trees in the school orchard on a grid, with the flagpole at the origin. She marks a young apple tree at the point $(-6, 9)$. Which quadrant of the grid contains this tree?



SHAPE & SPACE