

Creating simple scale drawings

MODULE 8 · LOCATION, TRANSFORMATIONS AND SCALE REVIEW

HOW TO ANSWER TODAY

- **Scale drawing.** Scale 1:N means 1 unit on the drawing = N units in real life. Multiply the drawing length by N.

Scale 1:100, drawing 5 cm $\rightarrow$ real $5 \times 100 = 500$ cm = 5 m

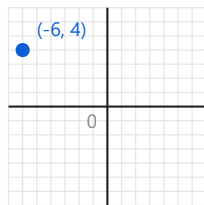
- **Quadrants.** Q1 is top-right; numbering goes ANTICLOCKWISE. A point on an axis is on the axis, not in a quadrant.

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

STRETCH PROBLEMS

- 1 Cian draws a scale plan of the school yard for his geography project at a scale of **1:500**. On his drawing, the long edge of the basketball court measures **5 cm**. What is the real length of that edge in centimetres?

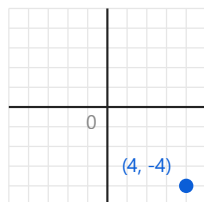
2



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?

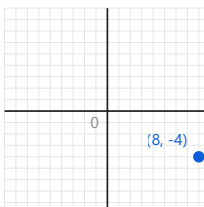
- 3 Aoife's class is designing a scale drawing of the new SuperValu car park at a scale of **1:200**. On her drawing, the length of the car park measures **15 cm**. What is the real length of the car park in centimetres?

4



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?

5



Aoife draws a coordinate grid of where each pupil sits in 5th class, with the teacher's desk at the origin. She marks her own desk at the point (8, -4). Which quadrant of the grid is Aoife's desk in?