

Plotting points in the first quadrant

WHAT THIS LESSON TEACHES

Two numbers in brackets like (3, 4) give the exact address of a point on a grid. The first number is the x-coordinate (along) and the second is the y-coordinate (up).

→ On a map of the school estate, (3, 4) tells you to go 3 squares across and 4 squares up to find one particular house.

→ (3, 4) lands in a different place from (4, 3) - the same digits, but plotted in the wrong order send you to the wrong house.

MODEL THIS ON THE BOARD

HOW TO PLOT A POINT

- 1 Start at the origin (0, 0).
- 2 Move **along** the x-axis by the first number in the pair.
- 3 Then move **up** the y-axis by the second number in the pair.
- 4 Mark the point and label it with the coordinates.

ANSWER KEY

Q1: (2, 8)

Q2: (1, 2)

Q3: (8, 1)

Q4: triangle (3,4)–(5,0)–(0,6)

Q5: (0,8)&(4,11) or (6,0)&(10,3)

a) **Never** — The order of coordinates matters so (3, 4) and (4, 3) are different places.

b) **Always** — The first number is always the x-coordinate along the axis.

c) **Always** — (0, 6) starts at 0 so it is on the vertical axis.

d) **Never** — Swapping changes the address completely on the grid.

EXTENSION SHEET · STRETCH ANSWERS

S1: 3 units

S2: (8, -4) → Q4

S3: (-6, 9) → Q2

S4: (-6, 4) → Q2

S5: 6 units