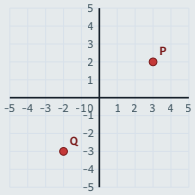
# The full four-quadrant co-ordinate plane

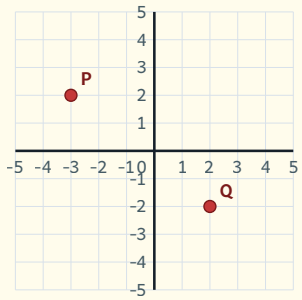
MODULE 8 · LOCATION, TRANSFORMATIONS AND SCALE REVIEW

Two number lines cross at the **origin** to make four quadrants. Points can have **negative** x or y values.




→ (−2, 3) is to the left and up; (2, −3) is right and down.

## PLOT P (−3, 2) AND Q (2, −2)




1. P (−3, 2): **3 left, 2 up.**
2. Q (2, −2): **2 right, 2 down.**
3. A negative x means left; a negative y means down.

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