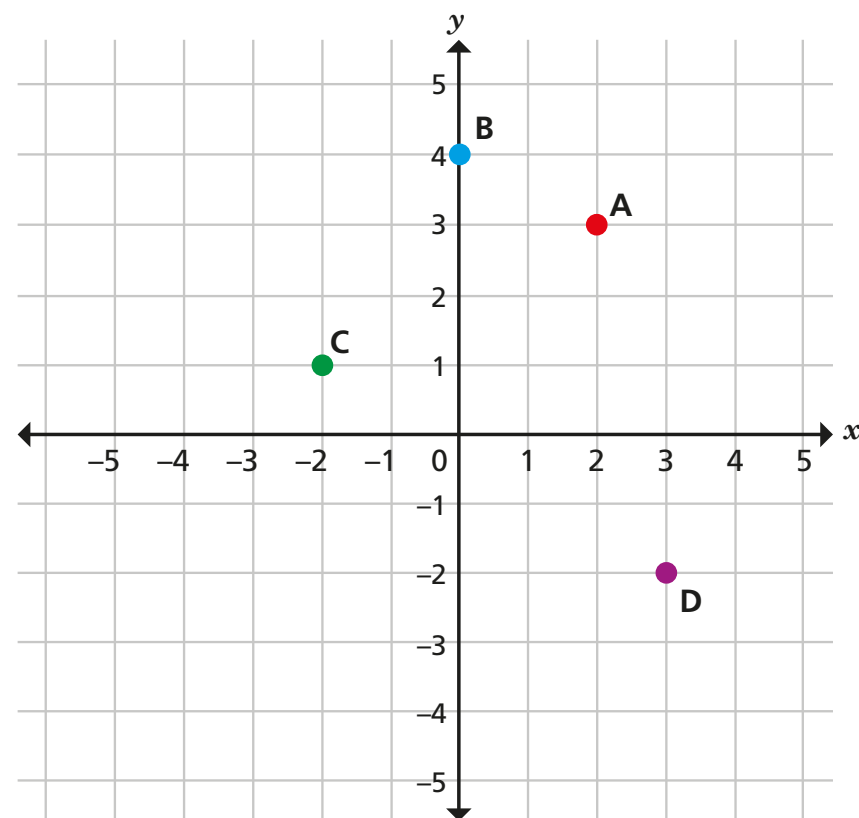# Work with coordinates in all four quadrants

1 Here is a coordinate grid showing the points A, B, C and D.

a) Write the coordinates of points A, B, C and D.

A (2 , 3)   C (-2 , 1)

B (0 , 4)   D (3 , -2)

b) Which point is in the 2nd quadrant? ___C___
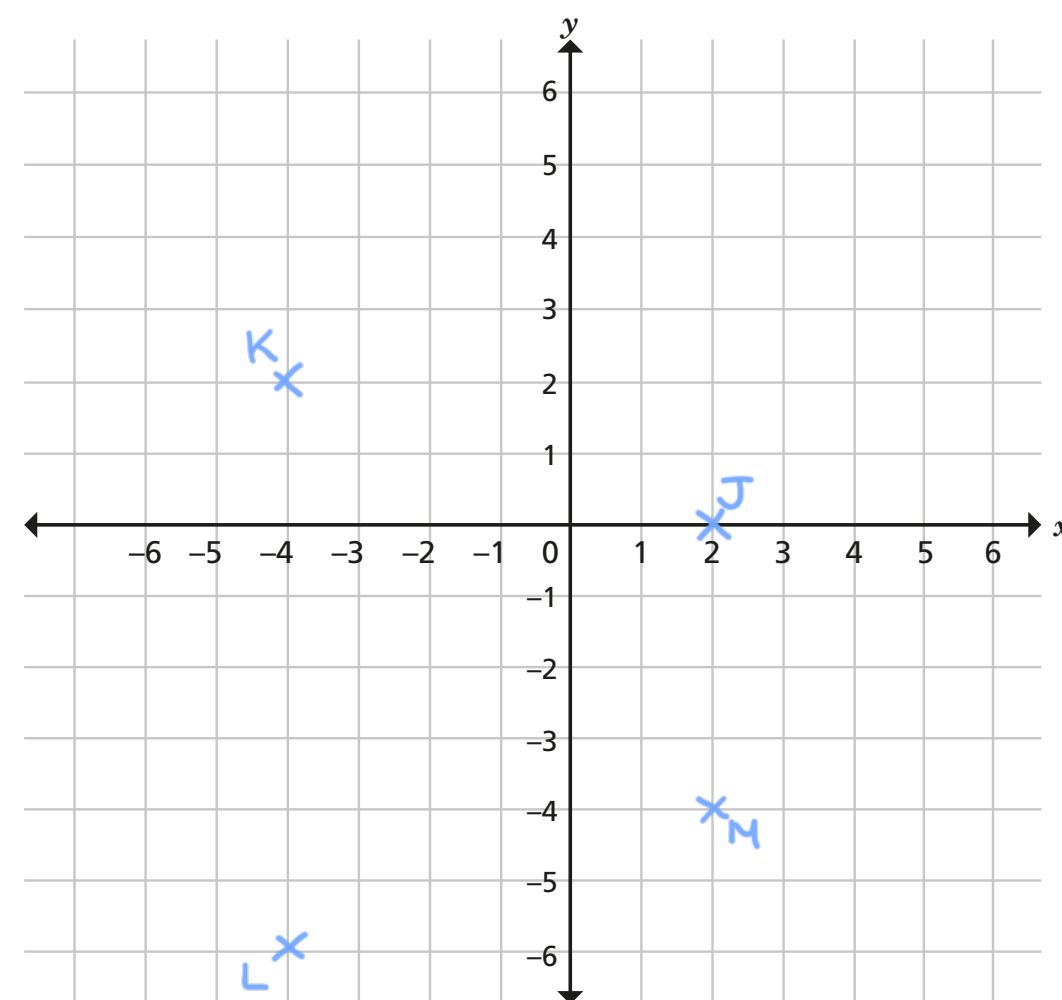
c) Which point is closest to the origin? ___C___

2 Which of the following points is not in the same quadrant as the others?

Circle your answer.

(–3, 1)   (–2, 1)   (–4, –2)   (–7, 2)

Is the point (0, 0) in the same quadrant as the other three points?

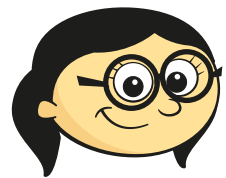**3** Here is a blank coordinate grid.
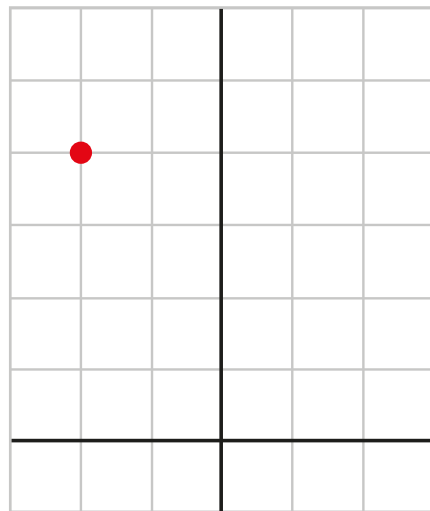

a) Plot these points on the grid.

J(2, 0)   L(–4, –6)   K(–4, 2)   M(2, –4)

b) What type of quadrilateral is the shape JKLM? ___Trapezium___

4

Point A is at (2, 4) because it is 2 across and 4 up.

Is Annie correct? **No**

Explain your answer.

The x-coordinate is negative and we don't know the scale on the axis.

5 The points Q(6, 0), R(0, 0) and S form a right-angled triangle QRS.

Tick the coordinate(s) that could be the point S.
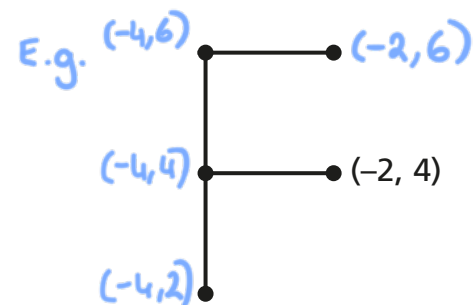
(6, 8) ☑   (0, −4) ☑   (9, −2) ☐   (−2, 0) ☐

6 Filip has drawn an F on a coordinate grid. One point is labelled.

Suggest possible values for the other points and label them on the diagram.

E.g. (−4,6) ●————● (−2,6)

(−4,4) ●————● (−2, 4)

(−4,2) ●

Compare answers with a partner.

Is there more than one possible set of answers?

7 The rectangle LMNP has an area of 700 square units.

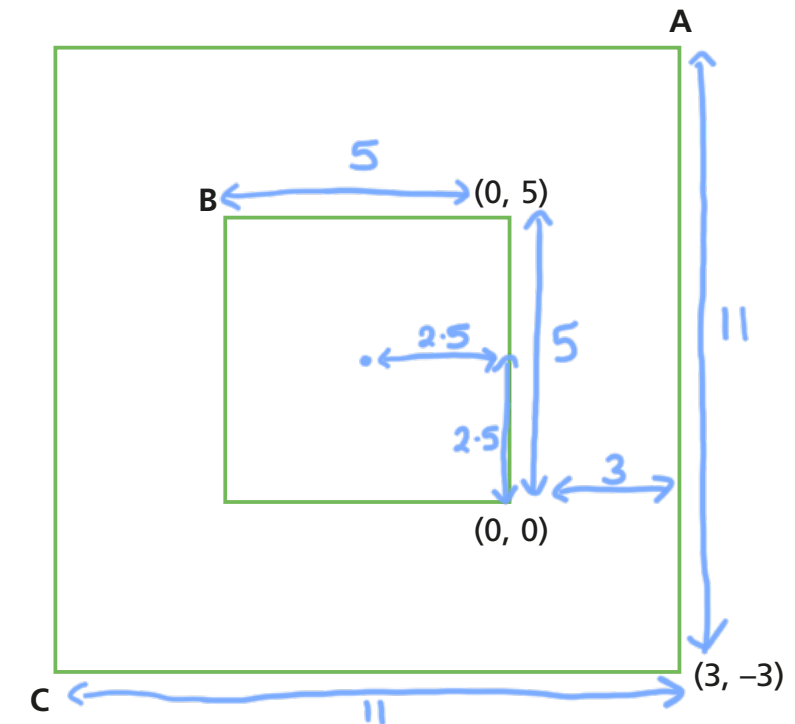The point L is (15, 15) and the point P is (−20, 15).

Find one possible pair of answers for M and N.

E.g.

M(−20 , 35) and N (15 , 35)

8 The diagram shows two concentric squares. (Concentric squares share the same centre.)

A

5
B ←————→ (0, 5)

2·5
5
2·5
11

3
(0, 0)

(3, −3)
C ←————→
11

a) Find the labelled coordinates.

A (3 , 8)   B (−5 , 5)   C (−8 , −3)

b) What are the coordinates of the centre point of both squares?

(−2·5 , 2·5)