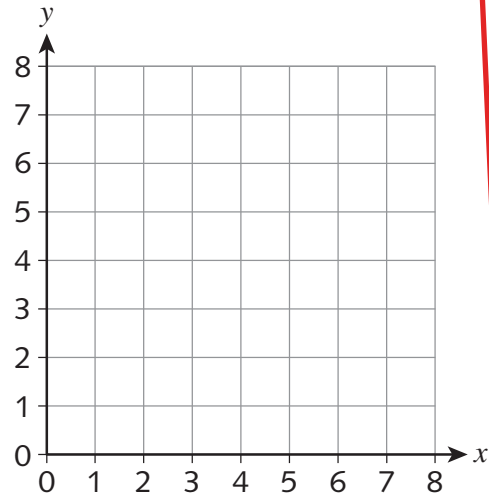


# Shapes and Coordinates

**PS** Problem-solving questions

## Challenge 1

- 1**
- Plot these points on the coordinate grid: (1,7) (1,4) (6,7). They are three vertices of a rectangle.
  - Plot the fourth vertex and use a ruler to complete the rectangle.
  - Write the coordinates of the fourth vertex. \_\_\_\_\_



- 2**
- Plot these points on the coordinate grid: (7,3) (3,1). They are two vertices of a right-angled triangle.
  - Plot the third vertex and use a ruler to complete the triangle.
  - Write the coordinates of the third vertex. \_\_\_\_\_



3 marks

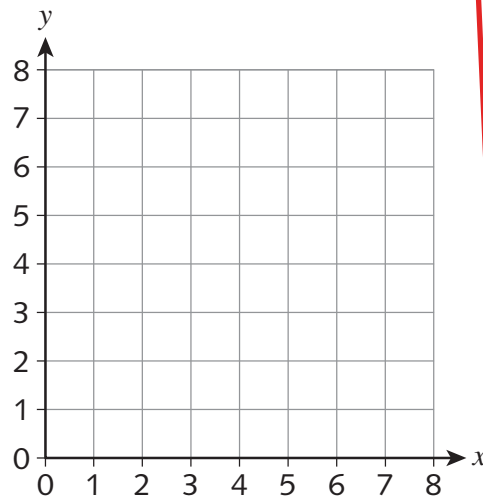


3 marks

Marks..... /6

## Challenge 2

- 1**
- Plot these points on the coordinate grid: (3,8) (1,6) (5,6). They are three vertices of a square.
  - Plot the fourth vertex and use a ruler to complete the square.
  - Write the coordinates of the fourth vertex. \_\_\_\_\_



- 2**
- Plot these points on the coordinate grid: (6,6) (4,4) (8,4). They are three vertices of a kite.
  - Plot a possible fourth vertex. Use a ruler to complete the kite.
  - Write possible coordinates of the fourth vertex. \_\_\_\_\_



3 marks



3 marks

Marks..... /6

# Shapes and Coordinates

## Challenge 3

**PS** **1** Three vertices of a square are: (10,15) (10,10) (15,15).

Write the coordinates of the fourth vertex. \_\_\_\_\_



1 mark

**PS** **2** Matt draws a straight line on a coordinate grid.

He uses these coordinates:

(1,5) (3,6) (5,7) (7,8).

Matt extends the line.



Write the next pair of coordinates in the sequence. \_\_\_\_\_



1 mark

**3** a) These coordinates are the end points of a line: (2,2) (8,8).

Write the mid-point of the line. \_\_\_\_\_

b) These coordinates are the end points of a line: (2,8) (8,2).

Write the mid-point of the line. \_\_\_\_\_



2 marks

**4** Daria says, "If there is a set of coordinates and the first number is always the same, that means the line joining them must be a horizontal line."

Is Daria correct? Explain your answer.

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1 mark

Marks..... /5

Total marks ..... /17

How am I doing?

