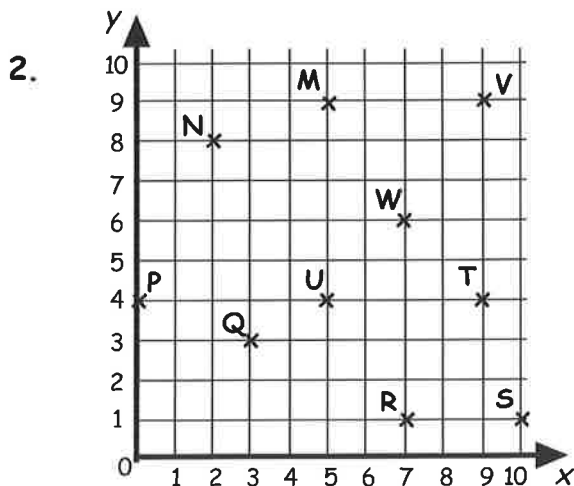
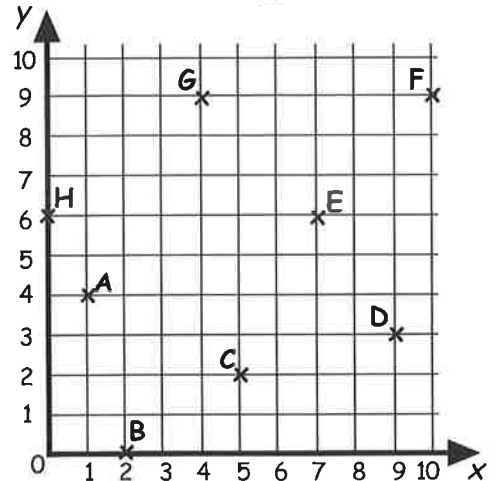


# CHAPTER 14



## Exercise 1

1. Write down the capital letter representing each point and put its coordinates next to it.  
For example :-  $C(5, 2)$ .



- a Which point has coordinates :-  
 (i)  $(7, 6)$       (ii)  $(0, 4)$   
 (iii)  $(3, 3)$       (iv)  $(9, 4)$  ?
- b Write down the coordinates of :-  
 (i) N                      (ii) M  
 (iii) S                     (iv) R.

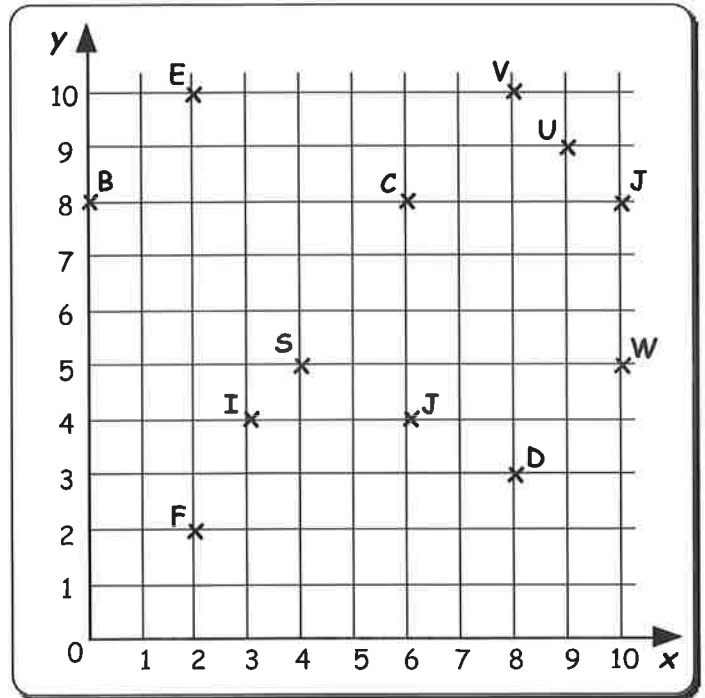
- c Four of the points can be joined to form a rectangle.  
 (i) Which four points?      (ii) Write down their coordinates.

3. a Draw a coordinate grid like the one in question 2 on squared paper.  
 Make the horizontal and vertical axes both go up from 0 to 10.
- b Mark with a cross the following six points :-  
 $C(3, 2)$   $D(7, 2)$   $E(10, 5)$   $F(7, 8)$   $G(3, 8)$   $H(0, 5)$ .
- c Join  $C$  to  $D$  to  $E$  to  $F$  to  $G$  to  $H$  and back to  $C$ .
- d What shape have you formed?

## Exercise 2

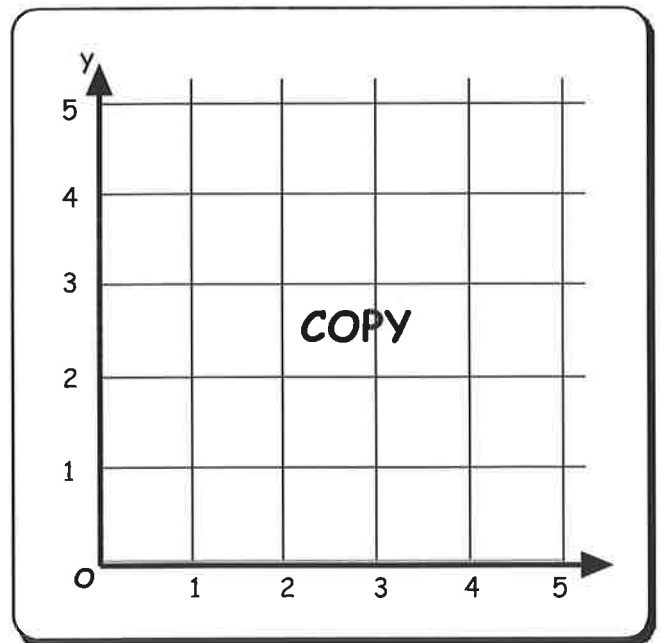
1. Look at this coordinate grid.

- a What are the coordinates of **E**?
- b Which point has coordinates  $(9, 9)$ ?
- c Which point has the same  $y$ -coordinate as **I**?
- d Which point has the same  $x$ -coordinate as **D**?
- e 3 points have the same  $y$ -coordinate. Name them and write down their coordinates.
- f Which point lies on the  $y$ -axis?
- g Which points have the same  $x$  and  $y$ -coordinate?
- h What shape is the quadrilateral **EVWS**?
- i Is the  $x$ -axis known as the horizontal axis or the vertical axis?



2. Draw a 5 by 5 coordinate grid as shown.

- a Plot the points **P**(1, 4), **Q**(3, 0) and **R**(5, 4).
- b **S** is a point to be put on the grid so that figure **PQRS** is a kite with diagonals 4 boxes and 5 boxes long.  
On your diagram plot the point **S** and write down its coordinates.
- c Join **P** to **R** and join **Q** to **S**. You now have the two diagonals of the kite.  
Write down the coordinates of the point where the two diagonals meet.



### Exercise 3

Draw a grid which goes 32 across and 32 up and down.

Plot the following points and join them with a ruler as you go.

**STOP** at the end of each section.

(1,8) (13,8) (13,10) (14,10) (14,8) (22,8) **STOP**

(2,10) (10,19) (18,10) **STOP**

(25,19) (27,21) (29,19) **STOP**

(13,16) (18,20) (29,10) **STOP**

(23,17) (28,19) (32,16) **STOP**

(20,18) (23,21) (26,18) **STOP**

(6,30) (4,28) (4,26) (6,24) (8,24) (10,26) (10,28) (8,30) (6,30) **STOP**

(12,26) (10,26) **STOP**

(6,32) (6,30) **STOP**

(12,28) (10,28) **STOP**

(2,28) (4,28) **STOP**

(8,32) (8,30) **STOP**

(6,22) (6,24) **STOP**

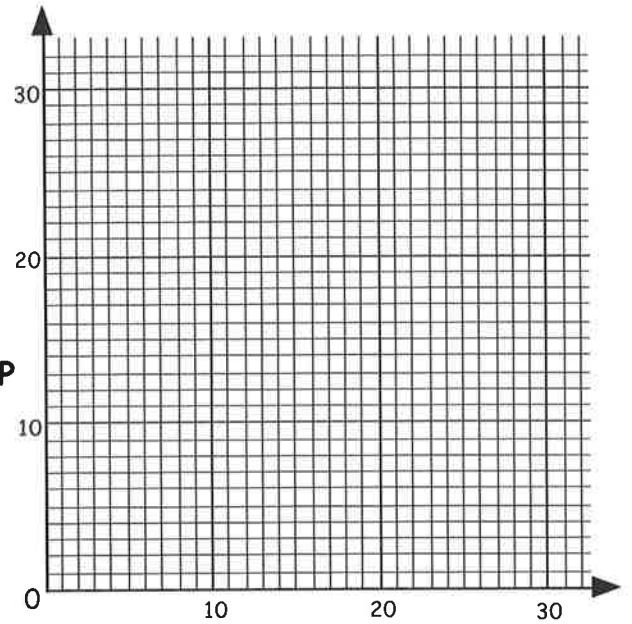
(2,26) (4,26) **STOP**

(8,22) (8,24) **STOP**

(27,4) (27,3) (28,4) (27,4) (26,3) (24,5) (23,5) (21,5) (20,6) (19,5) (18,5) (17,7)

(16,7) (15,6) (14,6) (14,5) (15,5) (16,3) (17,2) (17,0) (18,0) (18,2) (22,2) (22,0)

(23,0) (23,2) (24,2) (24,3) (23,5) **STOP**

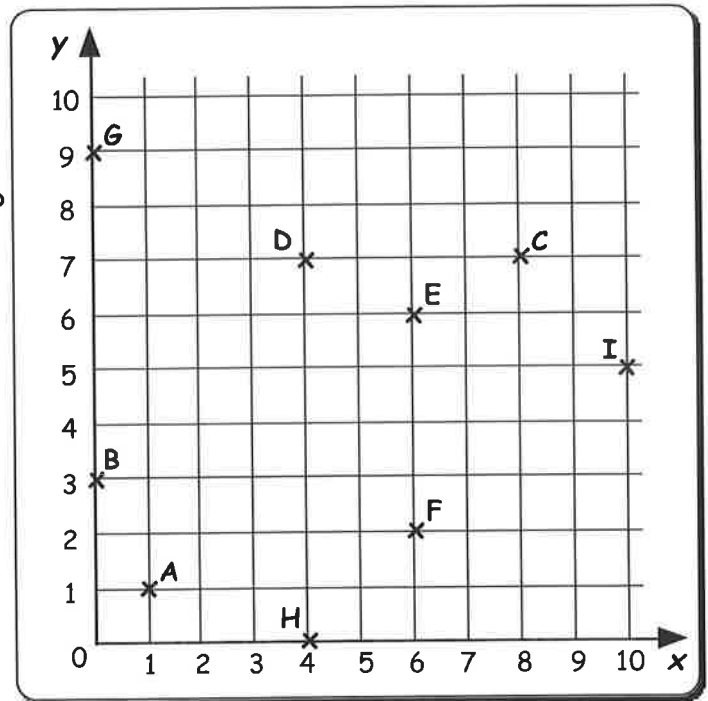


What have you drawn ?

## Revision Exercise

1. Look at this coordinate grid.

- a Which point has coordinates  $(6, 2)$ ?
- b What are the coordinates of B?
- c Which point lies on the  $x$ -axis?
- d Which point has the same  $x$ -coordinate as D?
- e Which points have the same  $x$  and  $y$ -coordinate?
- f Which points lie on the  $y$ -axis?
- g When 4 points are joined, a V shape kite is formed.
  - (i) Which 4 points?
  - (ii) Write down their coordinates.



2. Draw a 10 by 10 coordinate grid.

- a Plot the points **A**(2, 5), **B**(5, 8) and **C**(9, 4).
- b **D** is a point to be put on the grid so that figure **ABCD** is a rectangle.  
On your diagram plot point **D** and write down its coordinates.
- c Join **A** to **C** and join **B** to **D**. You now have the two **diagonals** of the rectangle.  
Write down the coordinates of the point where the two diagonals meet.
- d On your diagram, draw any lines of symmetry which your rectangle has.
- e How many lines of symmetry did you find?

