

CO-ORDINATES 1

TARGET To describe positions on the full co-ordinate grid.

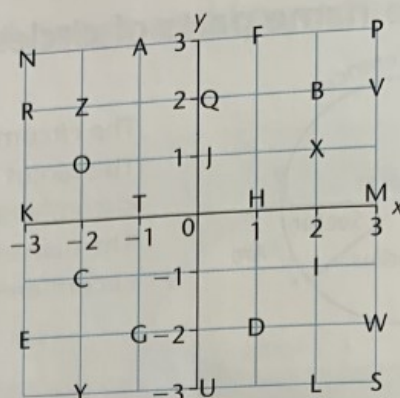
The position of a point on a grid is given by its x and y co-ordinates.

The x co-ordinate always comes first.

Examples

Point O is $(-2, 1)$ Point X is $(2, 1)$

Point C is $(-2, -1)$ Point I is $(2, -1)$



A



Use the above grid.
Which letter is at:

- 1 $(3, 4)$ 5 $(4, 3)$
2 $(5, 5)$ 6 $(3, 1)$
3 $(0, 3)$ 7 $(2, 2)$
4 $(1, 1)$ 8 $(5, 0)?$

Give the position of:

- 9 G 13 V
10 C 14 P
11 O 15 L
12 K 16 Q.

Use the grid to write:

- 17 your name
18 your school
19 your favourite colour
20 your favourite meal.

B

Use the above grid.
Which letter is at:

- 1 $(3, 2)$ 5 $(-2, 2)$
2 $(-3, -2)$ 6 $(1, -2)$
3 $(0, 1)$ 7 $(-1, 0)$
4 $(2, -3)$ 8 $(-2, -1)?$

Give the position of:

- 9 W 13 K
10 Y 14 P
11 Q 15 U
12 G 16 C.

Each set of co-ordinates spells out the name of a European capital city, but one letter has been moved. Find the city.

- 17 $(3, -3)$ 19 $(-2, 1)$
 $(-2, 1)$ $(3, 0)$
 $(2, -3)$ $(-3, -2)$
 $(-2, 1)$ $(-3, 2)$
18 $(-1, 0)$ 20 $(2, -1)$
 $(1, 0)$ $(3, -3)$
 $(-3, -2)$ $(-2, 1)$
 $(-3, 3)$ $(1, 3)$
 $(-1, 3)$ $(-1, 3)$
 $(3, -3)$

- 21 Write in co-ordinates the countries of which these cities are the capitals.

C

Use the above grid. Find the European capital cities.

- 1 $(2, -3)$ 3 $(3, -3)$
 $(0, 1)$ $(-3, 0)$
 $(0, -3)$ $(-2, 1)$
 $(2, 2)$ $(3, 3)$
 $(2, -3)$ $(0, 1)$
 $(0, 1)$ $(-3, -2)$
 $(-1, 3)$
 $(-3, 3)$ 4 $(-3, 2)$
 $(-1, 3)$ $(-3, -2)$
 $(-2, -3)$
2 $(3, 2)$ $(-3, 0)$
 $(-1, 3)$ $(0, 1)$
 $(1, -2)$ $(-1, 3)$
 $(0, -3)$ $(3, 2)$
 $(-2, 2)$ $(2, -1)$
 $(-3, 0)$

- 5 Write in co-ordinates the countries of which these cities are the capitals.

- 6 A $(-3, 1)$, B $(1, 3)$ and C $(3, -1)$ are three vertices of square ABCD. Draw a grid like the one above, plot the points and complete the square.

- 7 Find the midpoint of line:

- a) AB c) CD e) BD
b) BC d) AD f) AC.