Mathematics

Inequalities and the Cartesian plane Downloadable Resource

Mr Maseko

Try this

$$(\boxed{} , \boxed{})$$
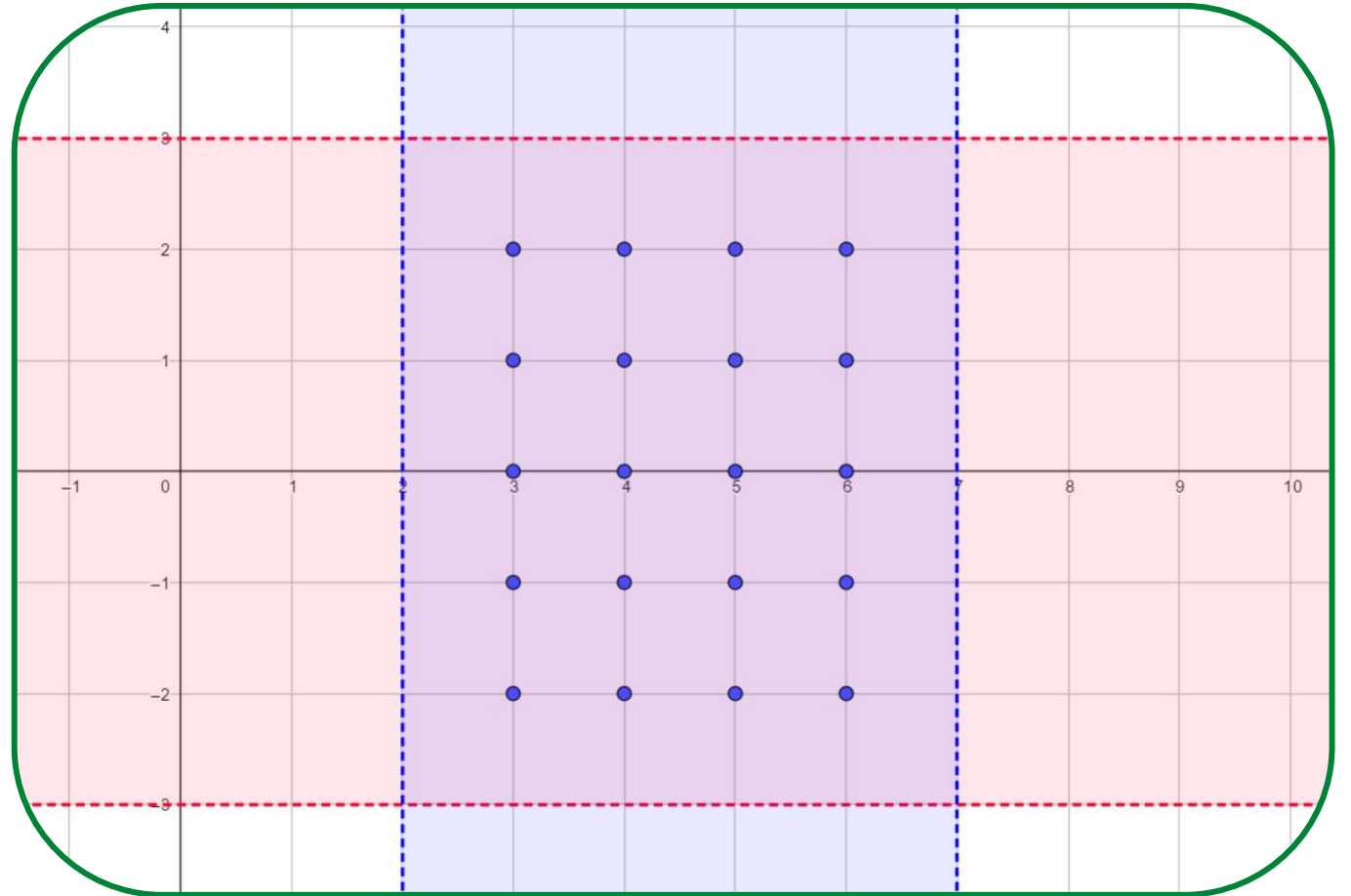
Fill in the blanks to make a coordinate with the following rules

a) The x-ordinate must be greater than 2 and less than less
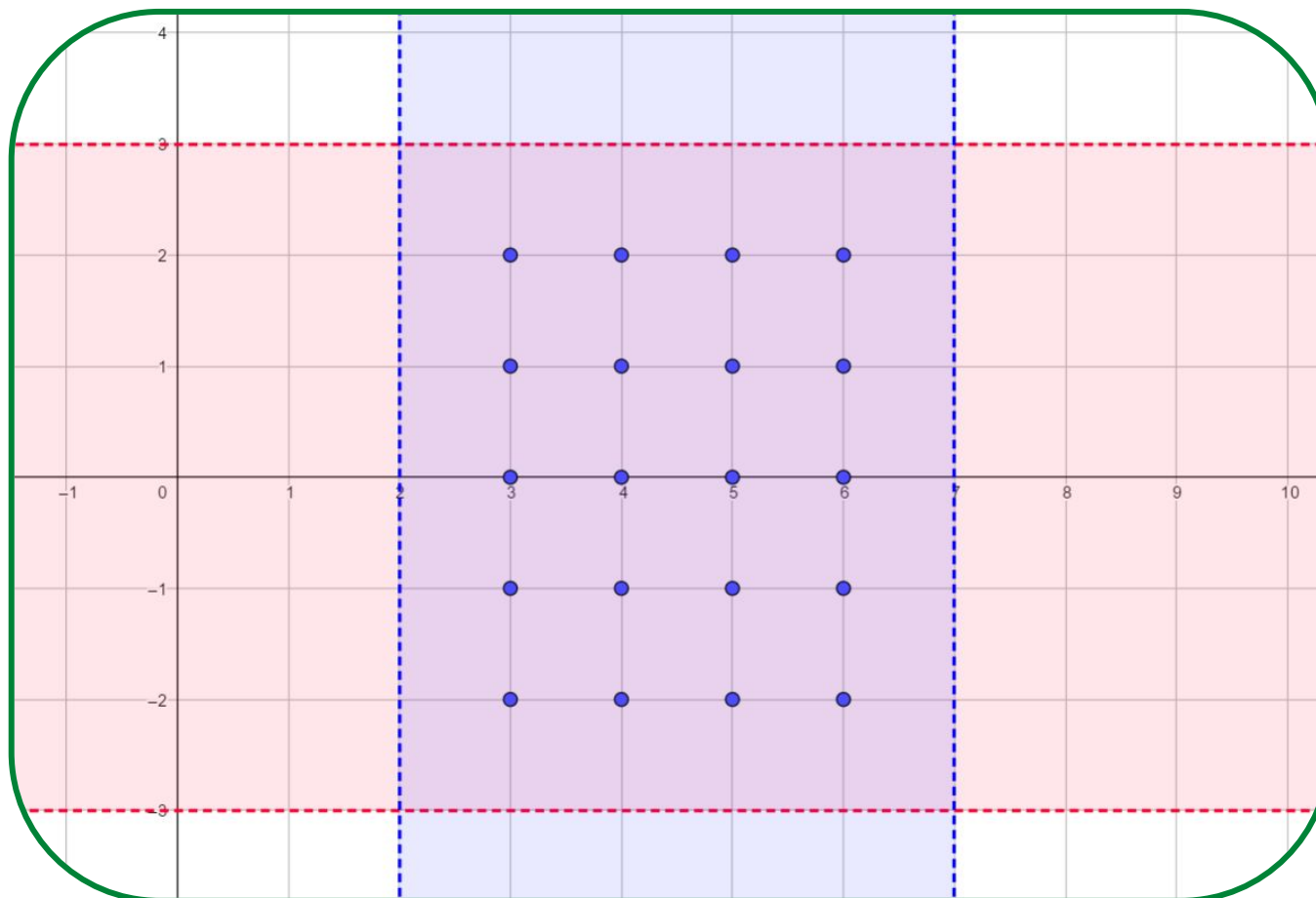b) The y-ordinate must be greater than -3 and less than 3

Connect

We can draw horizontal and vertical lines on a coordinate grid to show the boundaries we have been set
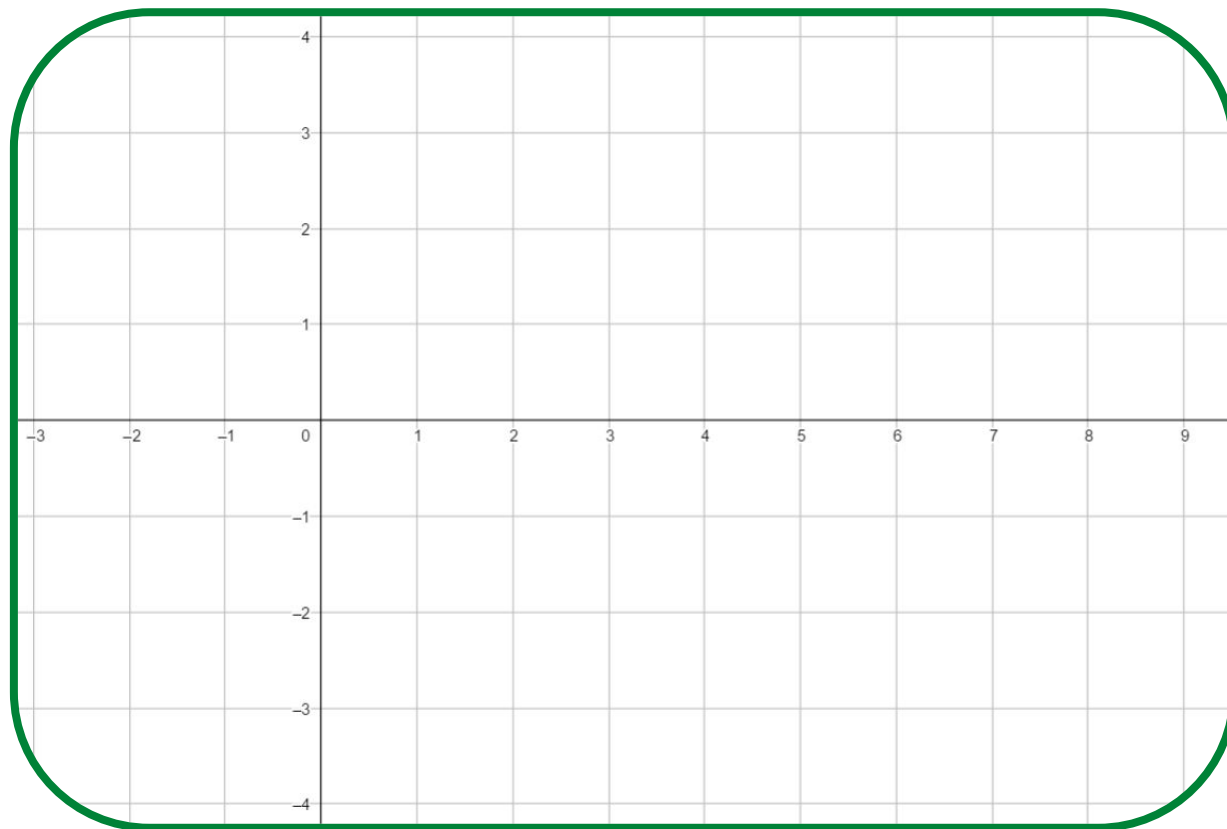
Connect

Writing as inequalities

Independent task

1) Write the inequality -5 < x < 3 in words.

2) On the grid, show all the coordinates that satisfy the following inequalities

-2 < x < 3

-2 < y < 2

Explore

Find another pair of inequalities that can be satisfied with exactly 20 integer coordinates.

This diagram shows there are 20 coordinates with integer values within the following inequalities

$$2 < x < 7$$

$$-3 < y < 3$$