Vertical Lines in the coordinate plane and their equations: basic facts
A vertical line in the plane has an equation of the form $x = c$, where c is a real number.

The vertical line whose equation is $x = c$ consists of all the points in the plane whose x-value is the number c.

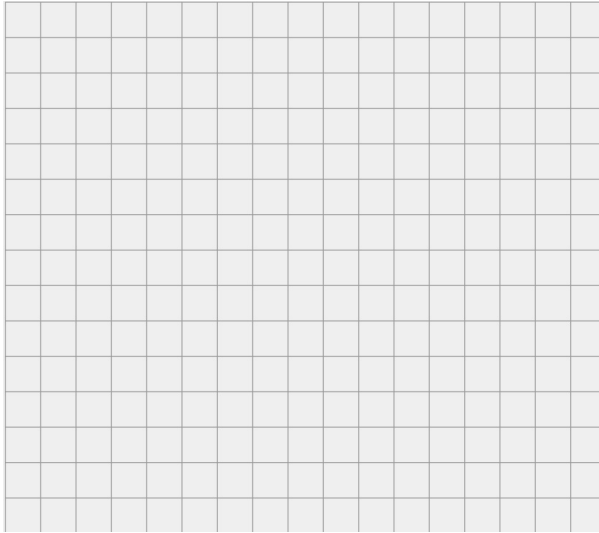1) Draw the graphs of the vertical lines $x = 3$, $x = -1$, and $x = \frac{1}{2}$:

2) Find the equations of the vertical lines in this graph:

3) What is the equation of the y-axis?

4) On the graph paper below, find the point $(4, 5)$ and draw the vertical line which passes through that point. What is the equation of the line?:

5) On the graph paper below, find the point $(-3, 0)$ and draw the vertical line which passes through that point. What is the equation of the line?: