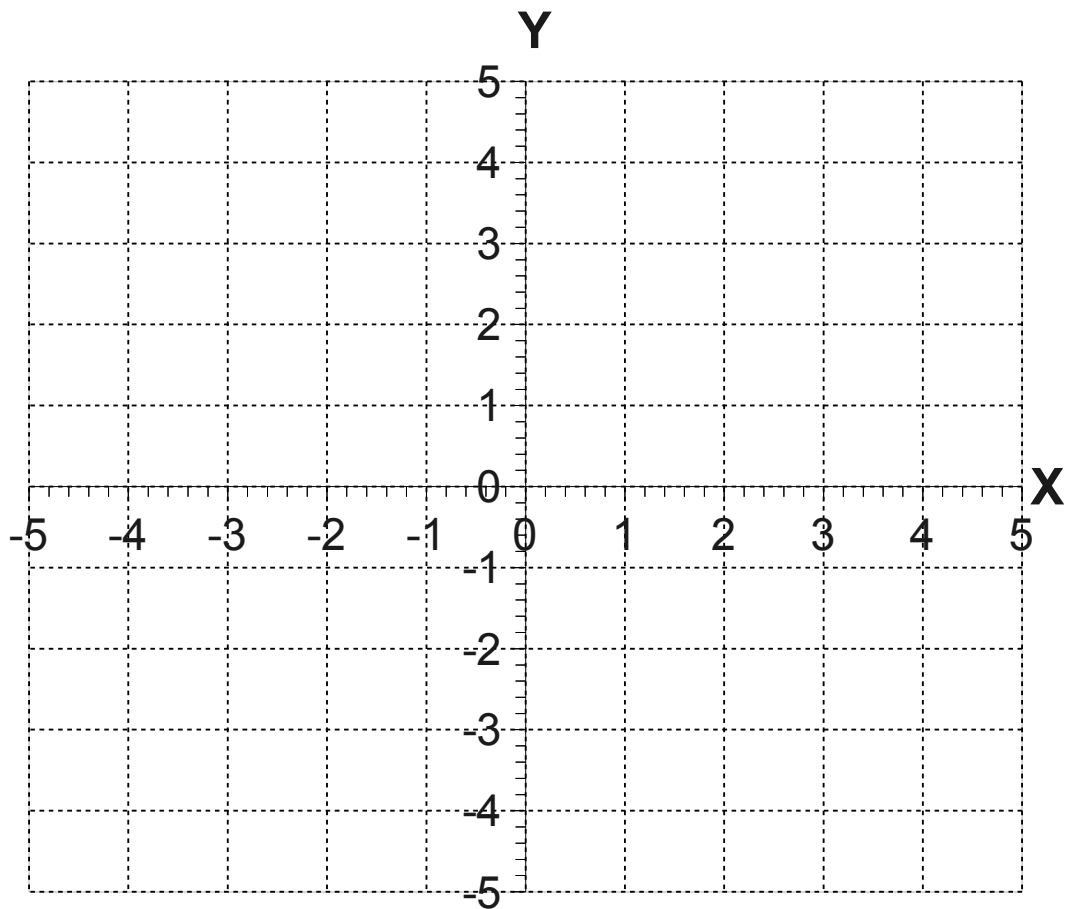


Graphs 2: 'Special' lines on graphs



On the axes above, plot these points...

$(-2, 4)$ $(0, 4)$ $(2, 4)$ $(4, 4)$ $(5, 4)$

Join the points with a line.

What do you notice about the line?

Now try these points...

$(-2, -5)$ $(-2, -1)$ $(-2, 1)$ $(-2, 3)$ $(-2, 5)$

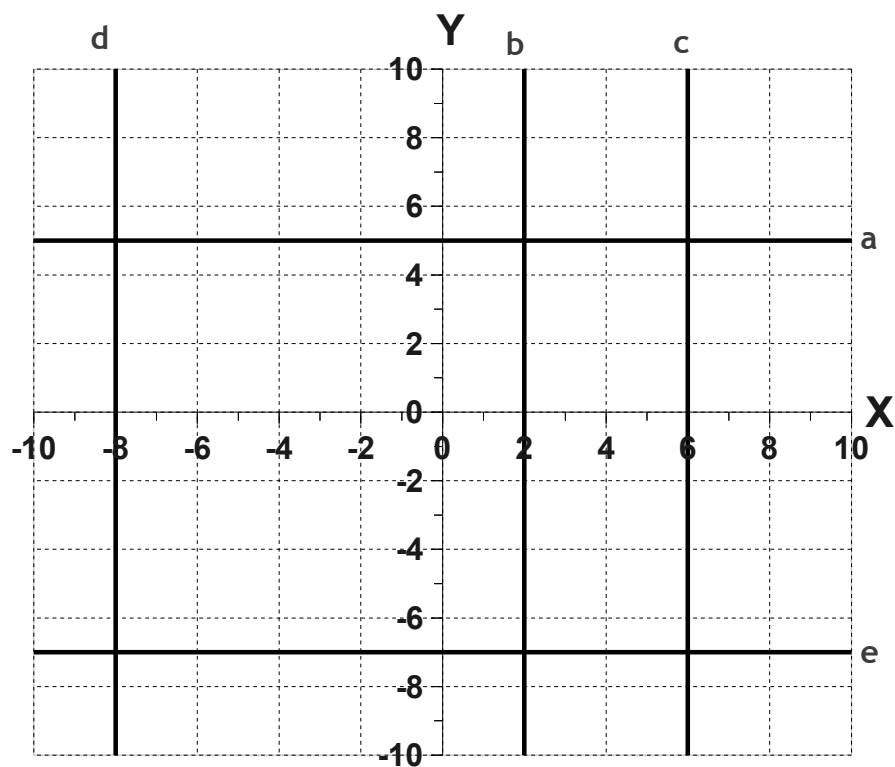
Join these points with a line.

What do you notice about that line?

What line would you plot for the 'formula' $X = 3$?

What line would you plot for the 'formula' $Y = -1$?

Name these special lines



Complete the table below. I've filled in the row for line b as an example.

Try adding your own descriptions for the X and Y axes as well!

Line	'Formula'	Description
a		
b	$X = 2$	Vertical line through $X = 2$ on the horizontal axis. Points on this line can have <i>any</i> Y coordinate but the X coordinate is <i>always</i> 2
c		
d		
e		
X axis	$Y = 0$	
Y axis	$X = 0$	