

Draw your own axes from -6 to 6 on both axes. Use a scale of 1 cm for each unit. Draw the line $y = x$ on your grid. (You may use the table below if you require).

x	0	1	2	3	4
y					

Using the below tables, draw the following lines on the same grid.

$$y = 2x$$

x	-2	-1	0	1	2
y					

$$y = 3x$$

x	-2	-1	0	1	2
y					

$$y = -x$$

x	-6	-4	-1	0	4
y					

$$y = 6x$$

x	-1	0	1
y			

$$y = -2x$$

x	-3	-2	0	1	3
y					

What do you notice about the slope of your graphs?

What do you notice about where the lines cross the y axis?

Why is this true? (think about the equation of the y axis)

Without drawing the line, where will $y = x - 4$ cross the y axis?