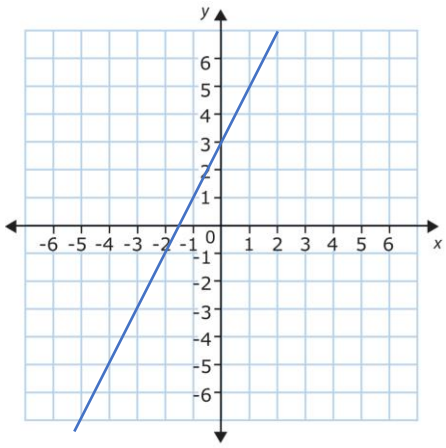
Finding the y-intercept

Examples:



y-intercept = 3

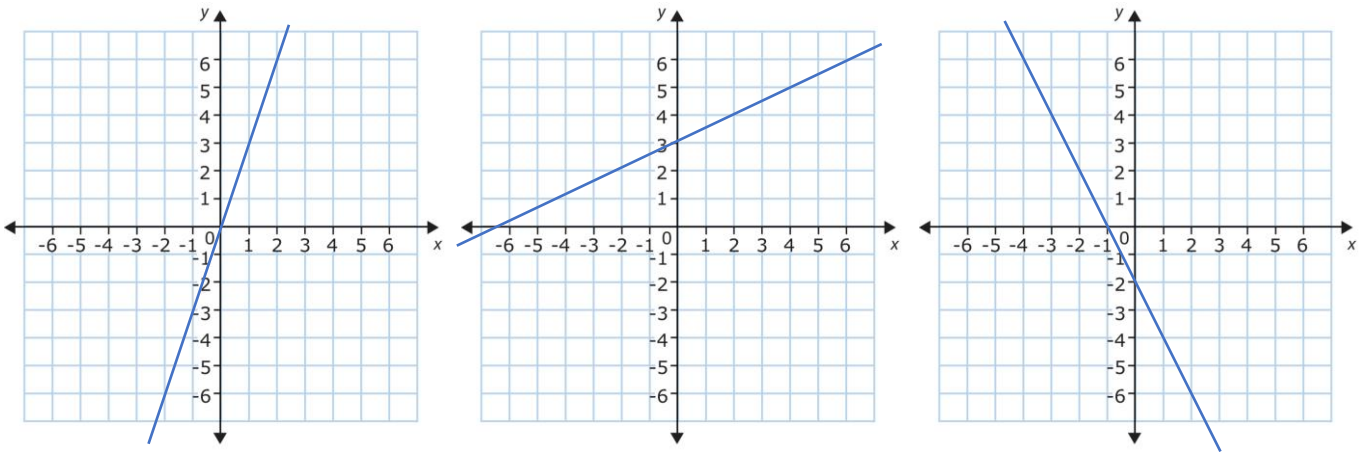
If a line has a gradient of 3 and goes through the point (6,7) what is the y intercept?

$$y = 3x + c$$
$$7 = 3(6) + c$$
$$7 = 18 + c$$
$$c = -11$$

So the y-intercept is -11

Remember: Starting from the gradient we substitute our corresponding x and y values. We can then solve for "c".

Q1) State the y intercept for the following graphs.



Q2) Find the following y-intercepts:

a) A line with a gradient of 2 going through (9,3)
b) A line with a gradient of 6 going through (4,20)
c) A line with a gradient of $\frac{1}{2}$ going through (12,-2)
d) A line with a gradient of -3 going through (-5,8)
e) A line with a gradient of 0.5 going through (7,5)
f) A line with a gradient -10 going through (2,-11)