

**4.11 PreQuiz: Linear equations**

1. A linear function  $f$  is graphed below.

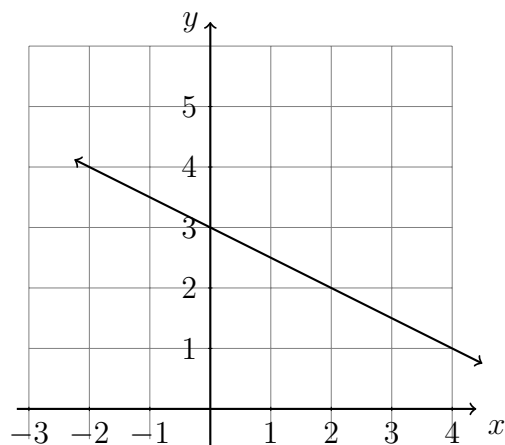
(a) Write down it's slope.

$m =$

(b) Write down it's  $y$ -intercept.

$b =$

(c) Write down the equation of the line.



2. Write the linear equation  $y + 1 = 2(x - 6)$  in the form  $y = mx + c$ .

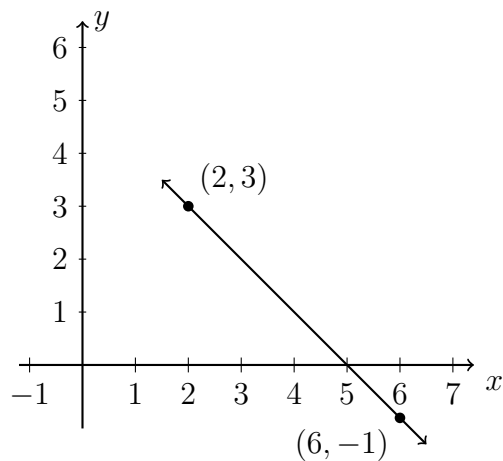
3. A line has a gradient (slope) of  $-\frac{3}{2}$  and passes through the point  $(6, 1)$ . Find the equation of the line in the form  $y = mx + c$ .

4. A line goes through the points  $(2, 3)$  and  $(6, -1)$ .

[5]

(a) Find the gradient of the line.

(b) Find the equation of the line in the form  $y = mx + c$ .



5. A linear equation is desired to model a set of data.

- (a) Plot the following points on the grid:  $(-4, 2)$ ,  $(-3, 1)$ ,  $(-1, 2)$ ,  $(1, 4)$ ,  $(3, 5)$ ,  $(5, 5)$   
(b) Draw a line of best fit through the data. (use a straight edge for full credit)  
(c) Write down the equation of the line.

