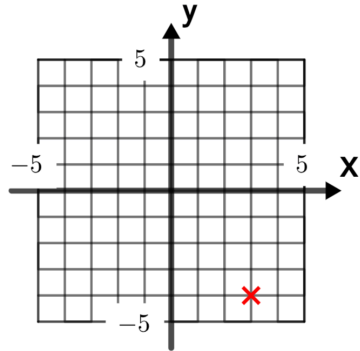


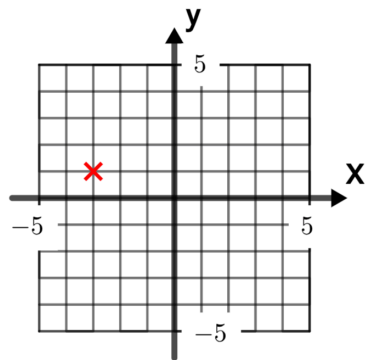
Coordinates and lines

Foundation worksheet

- 1) Write down the coordinates of the point shown.



- 2) Write down the coordinates of the point shown.

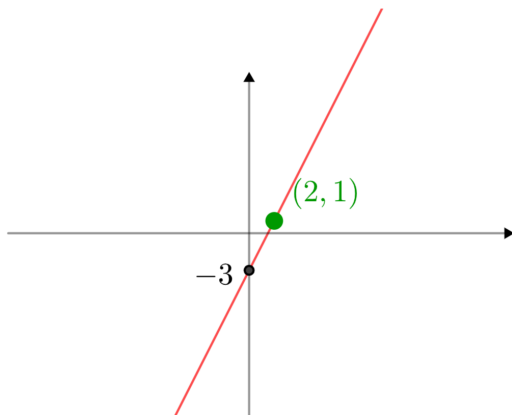


- 3) Find the coordinates of the midpoint of (2, 11) and (8, 13).
- 4) Find the coordinates of the midpoint of (-3, 1) and (-7, 5).
- 5) Find the coordinates of the midpoint of (-4, -2) and (-7, 3).

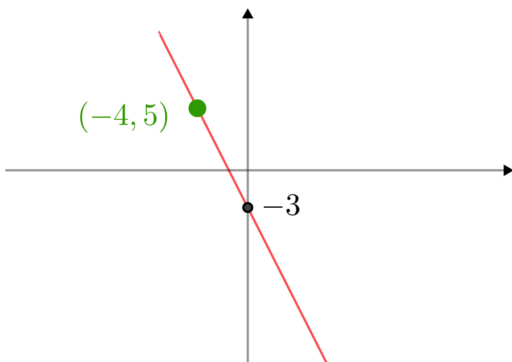
Coordinates and lines

Foundation worksheet

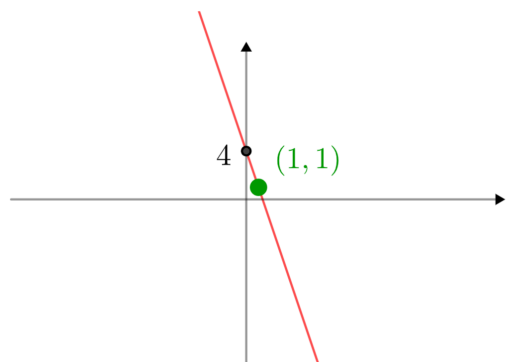
- 6) Find the equation of this line in the form $y = mx + c$.



- 7) Find the equation of this line in the form $y = mx + c$.



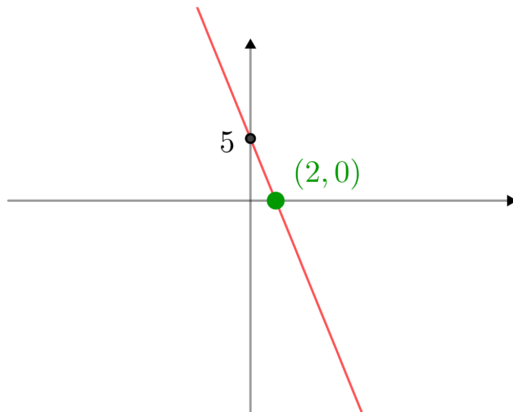
- 8) Find the equation of this line in the form $y = mx + c$.



Coordinates and lines

Foundation worksheet

- 9) Find the equation of this line in the form $y = mx + c$.



- 10) $(k, 11)$ is a point on the line $y = x$. Find k .
- 11) $(-4, u)$ is a point on the line $y = 3x + 2$. Find u .
- 12) $(p, 28)$ is a point on the line $y = 3x + 4$. Find p .
- 13) Find the equation of the line parallel to $y = 2x - 3$ that passes through $(0, 7)$.

Coordinates and lines

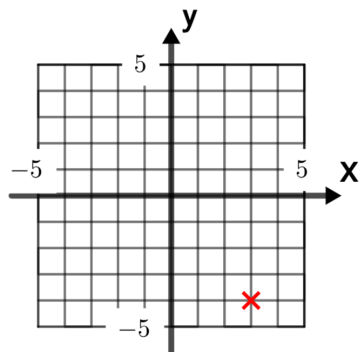
Foundation worksheet

- 14) Find the equation of the line parallel to $y = -5$ that passes through $(0, 4)$.
- 15) Find the equation of the line parallel to $y = x + 7$ that passes through $(0, -2)$.

Coordinates and lines

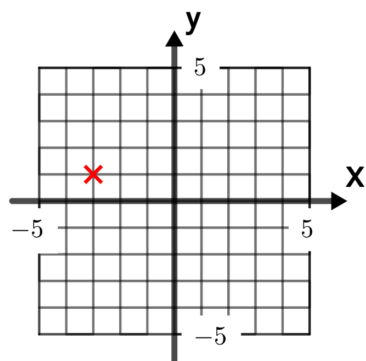
Foundation worksheet

- 1) Write down the coordinates of the point shown.



$(3, -4)$

- 2) Write down the coordinates of the point shown.



$(-3, 1)$

- 3) Find the coordinates of the midpoint of $(2, 11)$ and $(8, 13)$.

$(5, 12)$

- 4) Find the coordinates of the midpoint of $(-3, 1)$ and $(-7, 5)$.

$(-5, 3)$

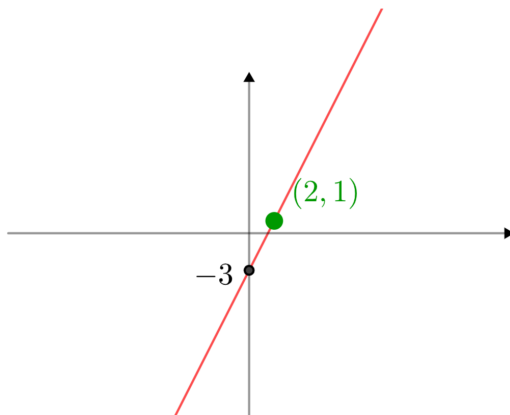
- 5) Find the coordinates of the midpoint of $(-4, -2)$ and $(-7, 3)$.

$(-5\frac{1}{2}, \frac{1}{2})$

Coordinates and lines

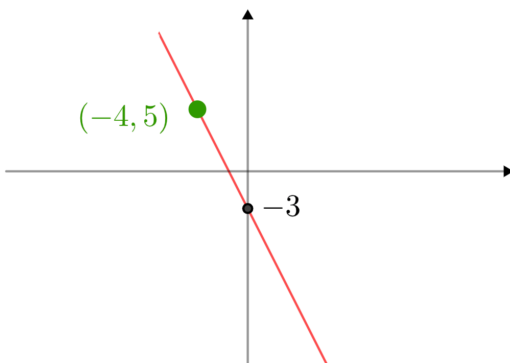
Foundation worksheet

- 6) Find the equation of this line in the form $y = mx + c$.



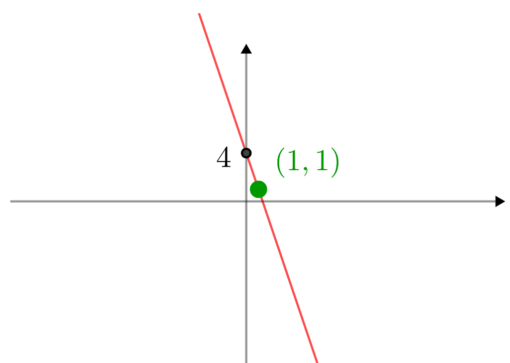
$$y = 2x - 3$$

- 7) Find the equation of this line in the form $y = mx + c$.



$$y = -2x - 3$$

- 8) Find the equation of this line in the form $y = mx + c$.

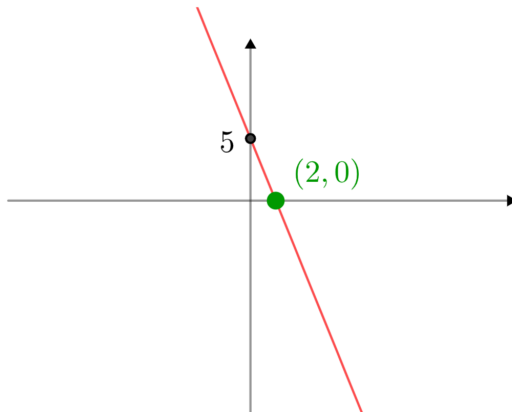


$$y = -3x + 4$$

Coordinates and lines

Foundation worksheet

- 9) Find the equation of this line in the form $y = mx + c$.



$$y = -\frac{5}{2}x + 5$$

- 10) $(k, 11)$ is a point on the line $y = x$. Find k .

$$k = 11$$

- 11) $(-4, u)$ is a point on the line $y = 3x + 2$. Find u .

Substituting $x = -4$, $y = u$ into $y = 3x + 2$:

$$u = 3 \times -4 + 2 = -10$$

- 12) $(p, 28)$ is a point on the line $y = 3x + 4$. Find p .

Substituting $x = p$, $y = 28$ into $y = 3x + 4$:

$$28 = 3p + 4$$

$$\Rightarrow 24 = 3p$$

$$\Rightarrow 8 = p$$

- 13) Find the equation of the line parallel to $y = 2x - 3$ that passes through $(0, 7)$.

We need a gradient of 2 and a y -intercept of 7, so:

$$y = 2x + 7$$

Coordinates and lines

Foundation worksheet

- 14) Find the equation of the line parallel to $y = -5$ that passes through $(0, 4)$.

We need horizontal line (gradient 0) with a y -intercept of 4, so:

$$y = 4$$

- 15) Find the equation of the line parallel to $y = x + 7$ that passes through $(0, -2)$.

We need a gradient of 1 and a y -intercept of -2 , so:

$$y = x - 2$$