GCSE FOUNDATION · REVISION MAT 2

Straight-line graphs

1 Complete the table of values for $y = 3x - 2$

x	−2	−1	0	1	2	3
y				1	4	

2 Write down the gradient and the y-intercept of the line

$y = -2x + 7$

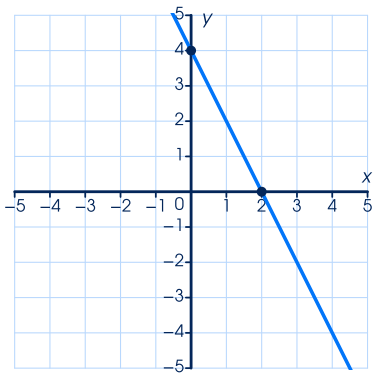
3 Does the point (−2, 9) lie on the line $y = -4x + 1$?

Explain your answer.

4 Show that these two lines are parallel.

$y = -3x + 1$
$2y = -6x + 5$

5 A straight line is drawn on the grid.



Find the equation of the line.

6 The line $x = -2$ and the line $y = -3x + 4$ cross at the point P.

(a) Find the coordinates of P.

(b) Describe the line $x = -2$.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 2

Straight-line graphs

1

x	−2	−1	0	1	2	3
y	**−8**	**−5**	**−2**	1	4	**7**

2 Gradient **−2**

y-intercept **7**

3 When $x = -2$, $y = -4 \times -2 + 1 = 9$

Yes, because this matches.

4 Divide the second equation by 2:

$y = -3x + \frac{5}{2}$

Both lines have gradient **−3**, so they are parallel ✓

5 Gradient = −4 ÷ 2 = -2

y-intercept = 4

$y = -2x + 4$

6 (a) $y = -3 \times -2 + 4 = 10$, so P = **(−2, 10)**

(b) **A vertical line** through −2 on the x-axis.