GCSE FOUNDATION · REVISION MAT 4

Straight-line graphs

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

x	−2	−1	0	1	2	3
y	−7	−5				

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

$y = 4x + 1$

3 Does the point (3, 14) lie on the line $y = 5x - 2$?

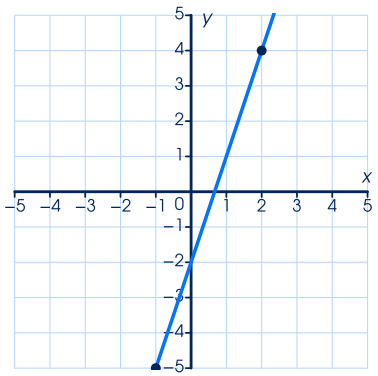
Explain your answer.

4 Show that these two lines are parallel.

$y = x + 4$

$4y = 4x - 3$

5 A straight line is drawn on the grid.



Find the equation of the line.

6 The line $x = 1$ and the line $y = -x + 5$ cross at the point P.

(a) Find the coordinates of P.

(b) Describe the line $x = 1$.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 4

Straight-line graphs

1

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

2 Gradient **4**

y-intercept **1**

3 When $x = 3$, $y = 5 \times 3 - 2 = 13$

No, because $13 \neq 14$.

4 Divide the second equation by 4:

$y = x - \frac{3}{4}$

Both lines have gradient **1**, so they are parallel ✓

5 Gradient $= 9 \div 3 = 3$

y-intercept $= -2$

$\mathbf{y = 3x - 2}$

6 (a) $y = -1 \times 1 + 5 = 4$, so P = **(1, 4)**

(b) **A vertical line** through 1 on the x-axis.

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