GCSE FOUNDATION · REVISION MAT 1

Straight-line graphs

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

x	−2	−1	0	1	2	3
y		−1	1			

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

$y = 3x - 5$

3 Does the point (4, 11) lie on the line $y = 3x - 1$?

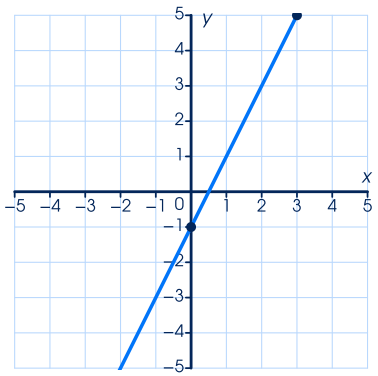
Explain your answer.

4 Show that these two lines are parallel.

$y = 2x + 3$

$2y = 4x - 1$

5 A straight line is drawn on the grid.



Find the equation of the line.

6 The line $x = 3$ and the line $y = 2x - 1$ cross at the point P.

(a) Find the coordinates of P.

(b) Describe the line $x = 3$.

Mr&Mrs MATHS

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

2 Gradient **3**

y-intercept **-5**

3 When $x = 4$, $y = 3 \times 4 - 1 = 11$

Yes, because this matches.

ANSWERS · REVISION MAT 1

Straight-line graphs

4 Divide the second equation by 2:

$y = 2x - \frac{1}{2}$

Both lines have gradient **2**, so they are parallel ✓

5 Gradient $= 6 \div 3 = 2$

y-intercept $= -1$

$y = 2x - 1$

6 (a) $y = 2 \times 3 - 1 = 5$, so P = **(3, 5)**

(b) **A vertical line** through 3 on the x-axis.

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