

Linear Relations - Exit Slip # 2 - Answer Key

1 a) Complete the table below (1 mark)

Input , x	Output , y
-1	1
0	4
1	7
2	<b>10</b>
3	<b>13</b>

b) Write an equation to describe the relationship between x and y (1 mark).

**$Y = 3x + 4$**

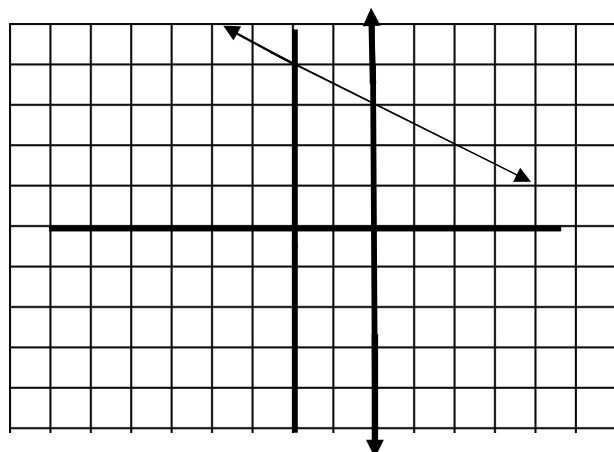
c) Use your equation to find y when x = 6 (1 mark).

**$Y = 3(6) + 4$                    $y = 18 + 4$                    $y = 22$**

2 a) Graph the equation x = 2 (1 mark)

b) The graph is a **vertical** line. (1 mark)

c) Every point on the graph has **x** -coordinate **2** (2 marks)



3 a) Complete the table of values for  $x + 2y = 8$  ( 2 marks)

x	y
0	<b>4</b>
1	<b>3.5</b>
2	<b>3</b>
3	<b>2.5</b>

b) Graph the equation  $x + 2y = 8$  (1 mark)

Unit 4 Vocabulary ( /21 Marks)

1	Vertical Axis	16	y-coordinate
2	Numerical Coefficient	9	Contains numbers, variables and/or operation symbols
3	Linear Relation	18	x - coordinate
4	Graph	14	A mathematical statement that shows two expressions are equal.
5	Discrete Data	5	Data on the graph that is not joined with a line.
6	Increase	12	x-axis
7	Decrease	4	A visual representation that shows a numerical relationship.
8	Pattern	7	To go down
9	Algebraic Expression	3	When the graph of a relation is a straight line.
10	Variable	20	$Y = 6$
11	Constant	19	$X = 4$
12	Horizontal Axis	8	A design or sequence that is predictable because part of it repeats.
13	Relation	21	A slanted line
14	Equation	15	How much something is worth or the output of a calculation.
15	Value	10	$Y = 3x + 7$
16	(2, 7)	13	When two variables are related, they form a ...
17	Ordered Pair	11	$Y = 3x + 8$
18	(3, 4)	17	A set of two numbers named in a specific order; represented by (x, y)
19	Vertical Line	2	$Y = 5x + 7$
20	Horizontal Line	1	y-axis
21	Oblique Line	6	To go up