

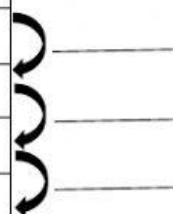
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Chapter 4.1 – 4.3 Quiz: Linear Relations

1. The pattern in the table below continues.

a) Write an equation that relates v to t .

Term Number, t	Equation: ____ = ____	Term Value, v
1	____ = ____	7
2	____ = ____	11
3	____ = ____	15
4	____ = ____	19
20	____ = ____	
	____ = ____	51



b) Find the term value of the 20th term.

*show your answer in the chart

c) Which term would have a value of 51?

*show your answer in the chart

2. A taxi company charges a fixed rate of \$3 plus \$1.50 per kilometer.

a) Create table of values to show the total you would pay for the first 4 kilometers.

number of km, x	Equation: ____ = ____	total paid, y
1	____ = ____	
2	____ = ____	
3	____ = ____	
4	____ = ____	
15	____ = ____	
	____ = ____	40.50

b) How much would it cost to drive 15 km?

*show your answer in the chart

c) How far did you go if the total was \$40.50?

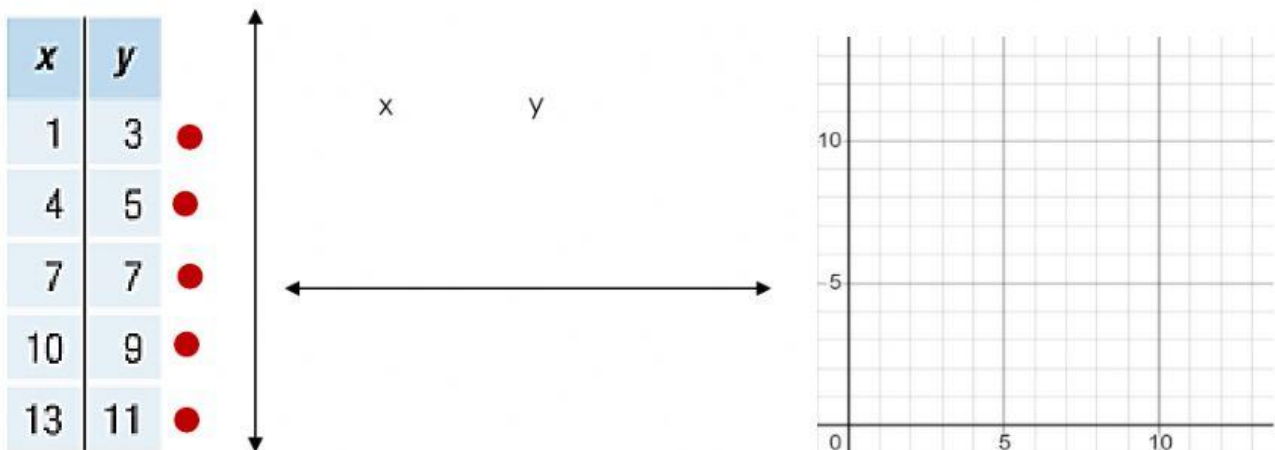
*show your answer in the chart

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3. Graph the following linear relation using all the information in the table.

a) Drag and drop the arrows and the variables x and y to label the x and y axes.

b) Drag and drop the red dots to the correct point on the graph.



4. Classify the following lines as Vertical, Horizontal or Oblique.

a) $x = 2$

b) $y = 4$

c) $y = 2x + 3$

d) $x + 5 =$

d) $-3 = y$

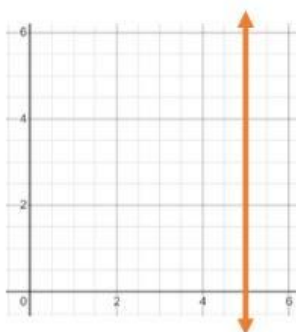
f) $14x + 7y = 21$

g) $-3x + y = 9$

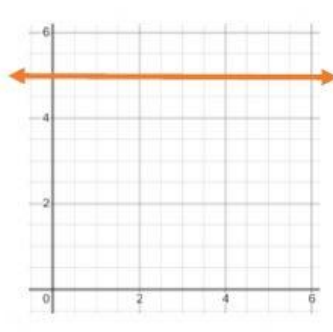
h) $y + 2 = 3$

5. Which equation describes each graph below?

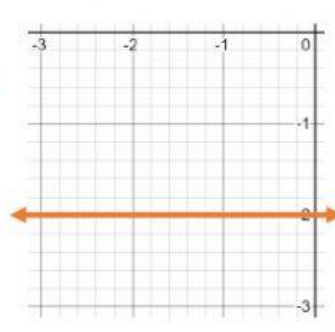
a)



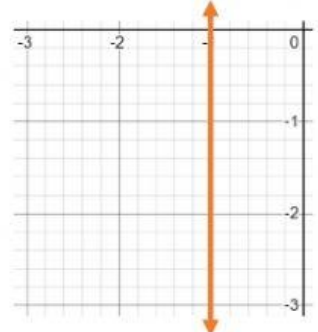
b)



c)



d)



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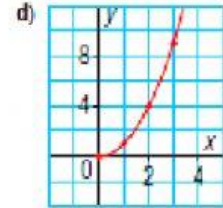
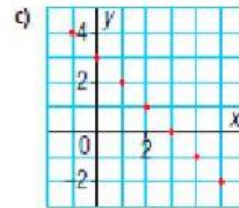
6. Indicate which of the following are linear and which are non-linear. Explain how you know.

a)

x	y
-2	2
0	8
2	16
4	32

b)

x	y
1	-3
2	-6
3	-9
4	-12



e) $x - 3y = 2$

f) $x^2 - 3x + 2 = y$

g) $(2, 6), (1, 8), (0, 10), (-1, 12)$

h) $(5, 10), (10, 5), (5, 0), (10, -5)$