Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_\_\_\_

Math 8 Unit 6 Practice Test ~ Linear Equations & Graphing

1. Create a table of values for each relation. Please show your work.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *x* | *y* |  |  |  |
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1. a) Create a table of values for the graph shown on the right.
2. How many storeys are there if the total height is 9m?
3. Describe the pattern.
4. Is it possible to have points between the ones on the graph? Explain your answer.
5. State whether the following are linear relations. Explain **two ways** you know.

 **Table 1 Table 2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***x*** | ***y*** |  | ***x*** | ***y*** |
| 1 | 3 |  | 2 | 3 |
| 2 | 6 |  | 4 | 9 |
| 3 | 9 |   | 6 | 16 |
| 4 | 12 |  | 8 | 24 |
| 5 | 15 |  | 10 | 38 |

Linear? \_\_ Linear?

1. Given the table of values below, write a linear equation representing the pattern.

|  |  |
| --- | --- |
| **Term Number (t)** | **Term Value (v)** |
| 1 | 8 |
| 2 | 13 |
| 3 | 18 |
| 4 | 23 |

 Pattern:

 Equation: **v =**

1. A taxi company in Kelowna charges customers $5.00, plus $2.00 for each kilometer being driven. This can be represented as C = 5 + 2d.
	1. Create a table of values for the relation (up to 8 km), and then graph the relation. Please give your graph a title and label the axes with numbers and units.



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* 1. Describe the relationship between the variables in the graph.
	2. What is the cost at 20 km?
	3. How far can a person be driven by the taxi if they have $23?