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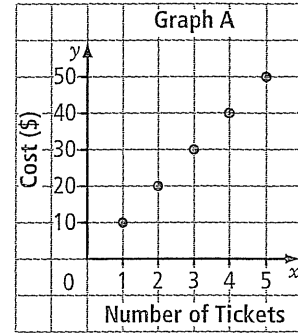
Analysing Graphs of Linear Relations

MathLinks 8, pages 332–341

Key Ideas Review

Use the graph at right to answer questions #1 to #4.

1. Complete a table of values for the graph.



2. Circle the three factors that should be included to describe the pattern on a graph.

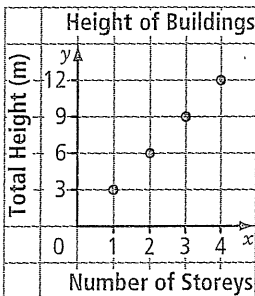
- a) where it starts
- b) how it changes
- c) slope of the line
- d) x-axis and y-axis titles
- e) what it relates to

3. Does the graph above show a linear relation? How do you know?

4. Does it make sense to have values between those on the graph? Explain.

Practise and Apply

5. Complete the sentences to describe the graph below.



a) The height of a one-storey building is _____ m, a _____-storey building is 6 m high, a three-storey building is _____ m, ...

b) The points appear to lie in a _____ . The line shows a _____ relation.

c) The graph shows that to move from one point to the next, you go _____ unit horizontally, and _____ units vertically.

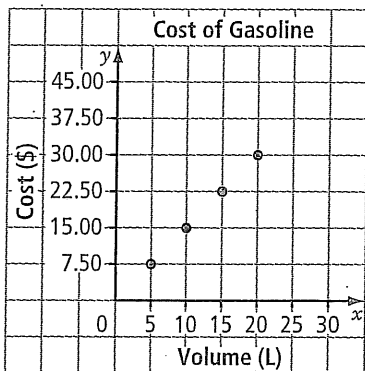
d) Complete the table of values for this graph.

	1	2	3	4		10
	3				15	

Name: _____

Date: _____

6. The graph shows the cost of gasoline based on the volume of gas.



- a) Does the graph show a linear relation? Explain.

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- b) The graph shows that for every five units horizontally, you go _____ units vertically.

- c) Complete the table of values from the graph.

Volume (L)	Cost (\$)
5	7.50

- d) Would it be reasonable to include a point for 7 L? Explain.

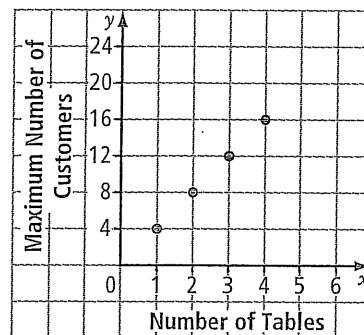
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- e) What is the cost of gasoline per litre?

- f) If the graph continued, what would be the cost of 25 L?

30 L?

7. The graph shows the maximum number of customers based on the number of tables in the restaurant.



- a) Title the graph.

- b) Describe the patterns on the graph. Does the graph show a linear relation?

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- c) Complete the table of values for the graph.

	1		4	5	6
	4	8			