

Section 6.2 Extra Practice

1. Convert each relation from its current representation to a set of ordered pairs and to a graph.

a)

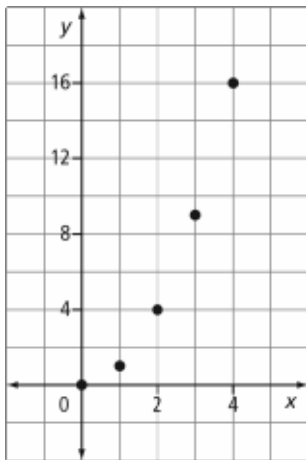
x	y
4	-2
1	-1
0	0
1	1
4	2

b) $y = 2x - 3$

2. Convert each relation from its current representation to a table of values and to words.

a) ... $(-1, -2), (0, 0), (1, 2), (2, 4), \dots$

b)



3. Determine whether each relation is linear or non-linear. Explain your decision.

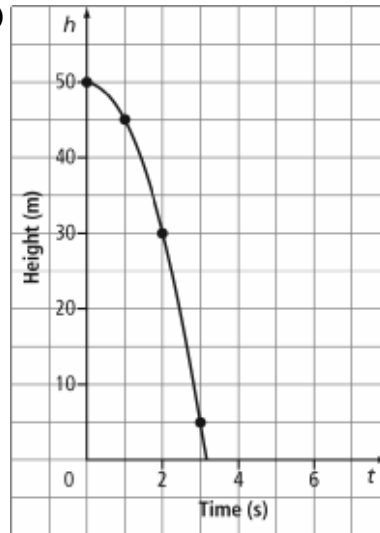
a) $y = \frac{9}{5}x + 32$

b)

x	y
1	1
2	1
3	2
4	3
5	5

c) $(-5, 0), (-2, 1), (1, 2), (4, 3), (7, 4)$

d)



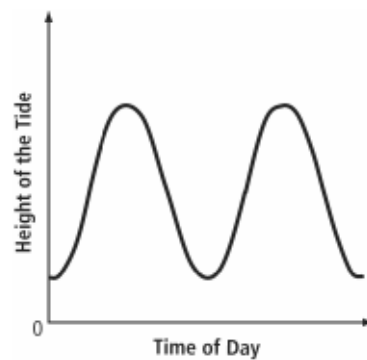
4. For each relation, state the dependent variable and the independent variable.

a) $V = \frac{4}{3}\pi r^3$

b)

Age of a Person (years)	Height (cm)
2	87
3	96
4	104
5	110

c)



Name: _____

Date: _____

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(continued)

5. The table of values shows the cost of movie tickets at a local theatre.

Number of Tickets	Cost (\$)
1	12
2	24
3	36
4	48

- a) Is this a linear or non-linear relationship? Explain how you know.
- b) Assign a variable to represent each quantity in the relation. Which variable is the dependent variable and which is the independent variable?
- c) Are the data discrete or continuous? Explain how you know.
- d) Graph the data.
6. A white-tailed deer can sprint up to 48 km/h. One deer is walking at 8 km/h. Consider the relationship between the total distance, in kilometres, travelled by this deer and time, in hours.
- a) Assign a variable to represent each quantity in the relation. Identify the dependent variable and the independent variable.
- b) Assume the deer walks for 3 h without stopping. Create a table of values for this relation.
- c) Graph the relation.
- d) Is the relation linear or non-linear? Explain.
- e) Is the relation continuous or discrete? Explain.