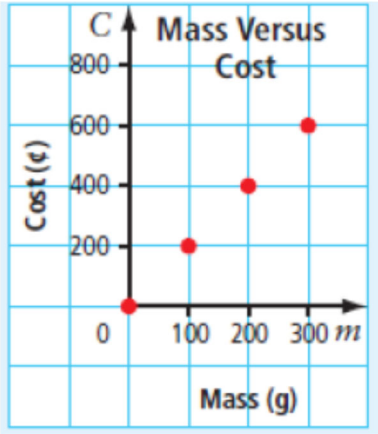
Name: _____ Date: _____

Learning Goal 5.2	I can express relations as expressions, in a table of values and on a graph.

A **linear relation** is

Example



Mass, *m* (g)	0	100	200	300
Cost , *C* (¢)	0	200	400	600

a. What is the difference in value for consecutive m − values?

b. What is the difference in value for consecutive C − values?

c. How can you describe, in words, the relationship between the values for m and C?

d. How are m and C related? Write an expression for C in terms of m.

We have three methods of representing a linear relationship.

1. 2. 3.

Example Consider each of the table of values.

Table 1

x	2	4	6	8
y	3	7	11	15

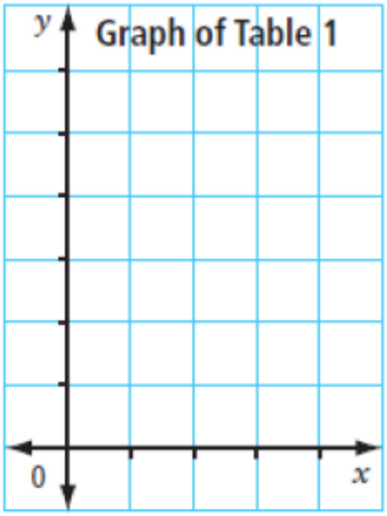
Table 2

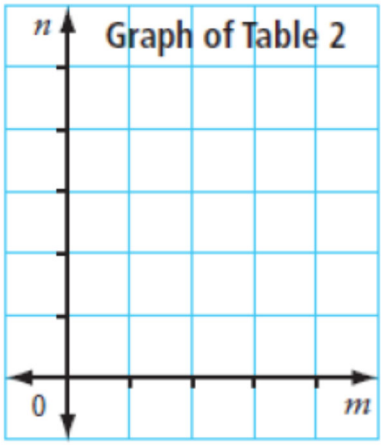
m	1	2	3	4
n	1	4	7	8

a. What is the pattern in the values for the first variable in each table?

b. What is the difference in consecutive values for the second variable in each table? Is the difference within each table the same?

c. Graph each set of ordered pairs. Which relations are linear?





d. How does your answer in part c. compare to your answer in part b?

Conclusion