NAME _____ DATE _____ PERIOD _____

Lesson 1 Homework Practice

Constant Rate of Change

Determine whether the relationship between the two quantities described in each table is linear. If so, find the constant rate of change. If not, explain your reasoning.

1. Fabric Needed for Costumes

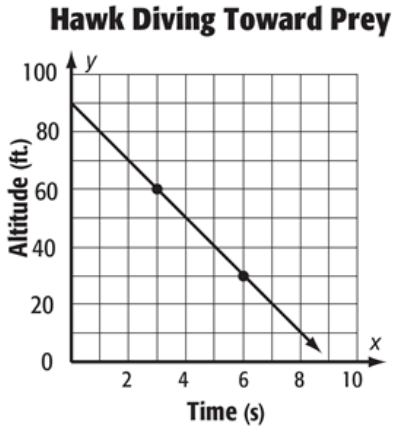
Number of Costumes	2	4	6	8
Fabric (yd)	7	14	21	28

2. Distance Traveled on Bike Trip

Day	1	2	3	4
Distance(mi)	21.8	43.6	68.8	90.6

For Exercises 3 and 4, refer to the graphs below.

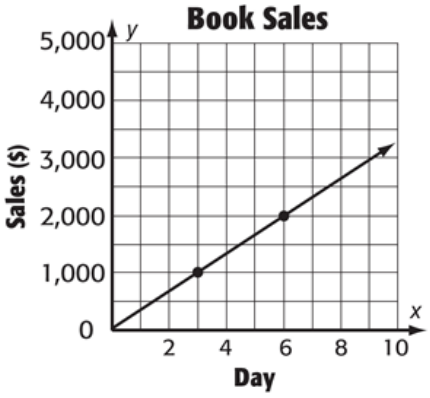
3.



a. Find the constant rate of change and interpret its meaning

b. Determine whether a proportional linear relationship exists between the two quantities shown in the graph. Explain your reasoning.

4.



a. Find the constant rate of change and interpret its meaning.

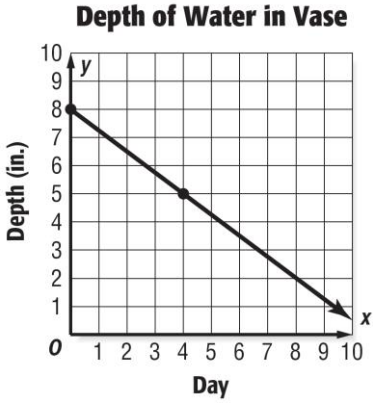
b. Determine whether a proportional linear relationship exists between the two quantities shown in the graph. Explain your reasoning.

NAME _____ DATE _____ PERIOD _____

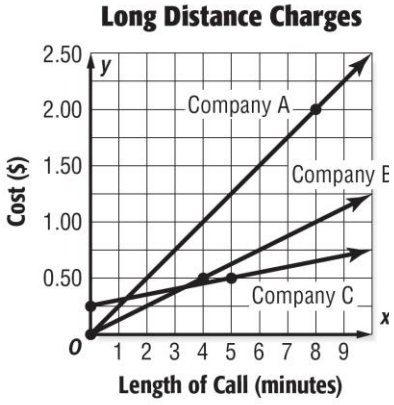
Lesson 1 Problem-Solving Practice

Constant Rate of Change

FLOWERS For Exercises 1 and 2, use the graph that shows the depth of the water in a vase of flowers over 8 days.



LONG DISTANCE For Exercises 3–6, use the graph that compares the costs of long distance phone calls with three different companies.



1. Find the rate of change for the line.	**2.** Interpret the difference between depth in inches and the day as a rate of change.
3. Interpret the difference between the cost in dollars and the length in minutes for Company A as a rate of change.	**4.** Interpret the difference between the cost in dollars and the length in minutes for Company B as a rate of change.
5. Interpret the difference between the cost in dollars and the length in minutes for Company C as a rate of change.	**6.** Which company charges the least for each additional minute? Explain your reasoning.