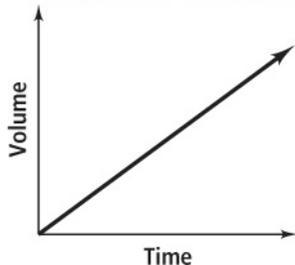# 4-1

Homework

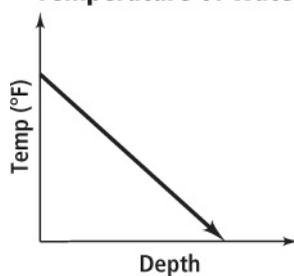### Using Graphs to Relate Two Quantities

What are the variables in each graph? Describe how the variables are related at various points on the graph.
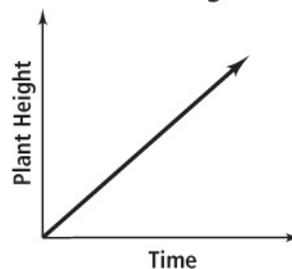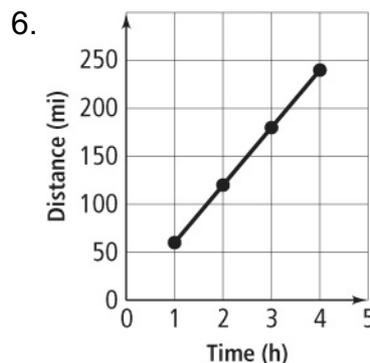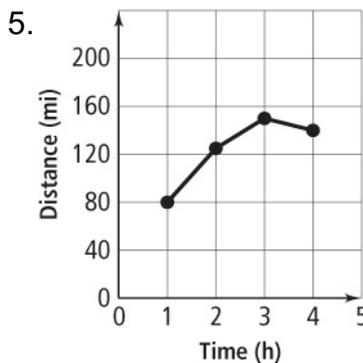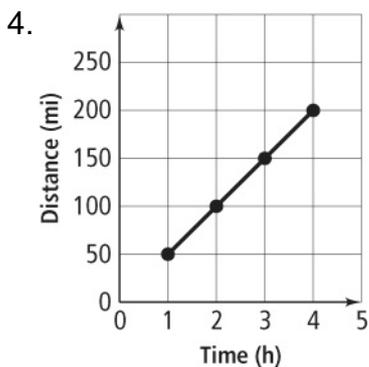
1. Volume of Pool Water

Volume vs Time

2. Temperature of Water

Temp (°F) vs Depth

3. Plant Height

Plant Height vs Time

Match each graph with its related table. Explain your answers.

4. Distance (mi) vs Time (h)

5. Distance (mi) vs Time (h)

6. Distance (mi) vs Time (h)

A.

Time (h)	Distance (mi)
1	60
2	120
3	180
4	240

B.

Time (h)	Distance (mi)
1	80
2	125
3	150
4	140

C.

Time (h)	Distance (mi)
1	50
2	100
3	150
4	200

4-1 **Homework** (continued)

Using Graphs to Relate Two Quantities

Sketch a graph to represent the situation. Label each section.

7. The price when you buy two shirts and the third one is free.

8. Your heart rate as you warm up for gym class, play basketball, and then cool down.

9. The temperature warms up during the day and then decreases at night.

10. Error Analysis DVDs cost $19.99 each for the first 2 purchased. After that, they cost $5.99 each. Describe and correct the error in sketching a graph to represent the relationship between the total cost and the number of DVDs purchased.
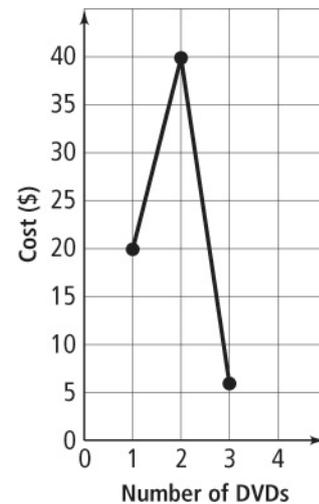
11. Sketch a graph of each situation. Are the graphs the same? Explain.
    a. your distance from school as you leave your house and walk to school
    b. your distance from school as you leave school and walk to your house