

6.1: Using Graphs to Relate Two Quantities

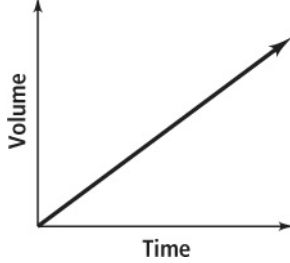
Name: \_\_\_\_\_  
Algebra 1

Date: \_\_\_\_\_  
Band: \_\_\_\_\_

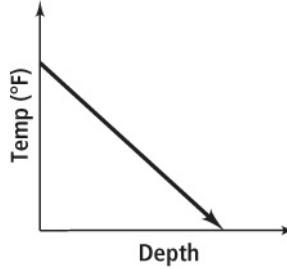
**LT#1:** Represent mathematical relationships using graphs.

What are the variables in each graph? Describe how the variables are related at various points on the graph.

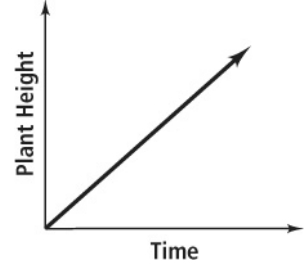
1. Volume of Pool Water



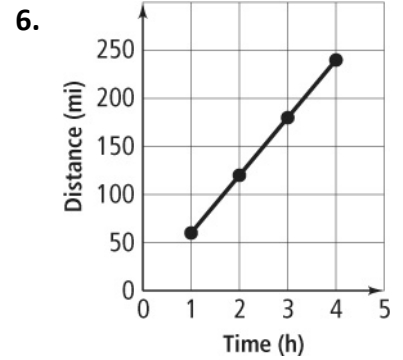
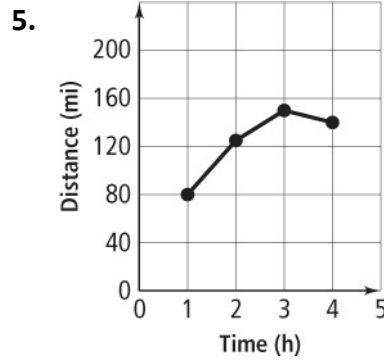
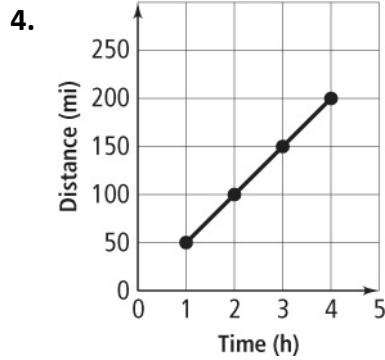
2. Temperature of Water



3. Plant Height



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



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

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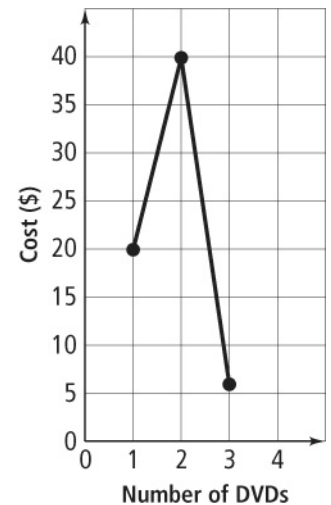
**Sketch a graph to represent the situation. Label each section.**

7. You buy two shirts. The third one is free.

8. 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. 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