

Lesson 3-6: Sketch Functions from Verbal Descriptions

1. Sample answer: It can show the relationship between the two variables and the behavior of the function (i.e., whether it is increasing, decreasing, or constant) in different intervals.
2. Sample answer: Determine which variable is the input value, or x-value, and place it on the horizontal axis. Place the output value, or y-value, on the vertical axis.
3. Sample answer: Analyze the relationship between the two variables to determine the shape of the graph.
4.
 - a. Input: time; output: height of the tree
 - b. Sample answer: The height of the tree increases over time.
 - c. See teacher's guide
5. See teacher's guide
6. The amount of money increases and decreases irregularly over time.
Sample answer: The amount of money a company earns increases during the month, and then they have to pay their costs. This occurs at the end of each month.
7. See teacher's guide
8. See teacher's guide
9. See teacher's guide
10. D
11. See teacher's guide
12. See teacher's guide
13. Sample answer: There is a carnival in a park. During the first few hours, people continue to arrive. For the next few hours, the number of people remains about the same.

See teacher's guide for graph.
14.
 - a. See teacher's guide
 - b. Sample answer: The shape of the graph will change. If more runs are scored, the graph would increase during those innings. If the team does not score, the graph would be constant during those innings.