

Name: _____



PRACTICE



TUTORIAL

4-8 Additional Practice

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In 1–8, identify the independent variable and the dependent variable in each situation.

1. The number of hours, h , spent studying and the score, s , on a test
2. The length, l , of a pencil and the number of times, t , it has been sharpened
3. The length of a story in pages, p , and the number of words, w , in a story
4. The number of students, s , ahead of you in the lunch line and the time, t , it takes you to get lunch
5. The amount of time, t , to finish a race and the number of laps, l , around a track
6. Tickets, t , sold for a race and the amount of money, m , collected
7. The length, l , of a fence and the amount of wood, w , to make the fence
8. The height, h , of a fence and the time, t , it takes to climb the fence

9. Write your own situation in which speed, s , is an independent variable.

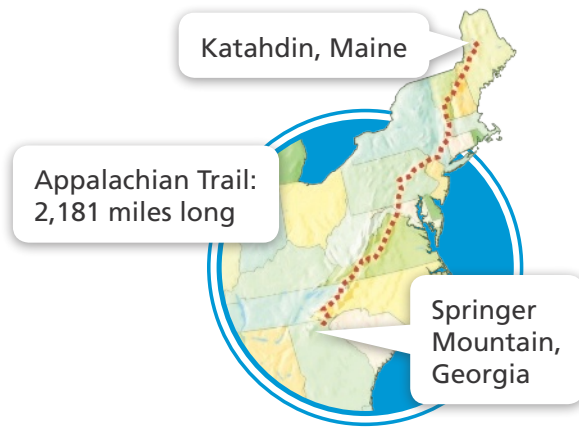
10. Name at least two independent variables that could result in a change in a monthly cell phone bill.

11. Critique Reasoning You spend d dollars for g identical pairs of glasses. A friend claims that because d increases if you increase g , and g increases if you increase d , either d or g could be the independent variable. Is your friend correct? Explain. © MP.3

12. The cost, c , of supplies for school depends on other factors. List at least two independent variables that could affect the cost of school supplies.



- 13. Reasoning** Two friends hiked the Appalachian Trail from Georgia to Maine. List at least two independent variables that could affect the number of days they took to hike the trail. © MP.2



- 14.** Steve had s songs on his music player. He bought n new songs. What is the dependent variable? Explain.

- 15. Construct Arguments** A baseball team gets 3 outs for each inning it comes up to bat. So far this season, Silvio's team has batted in 45 innings, n , and has made 135 outs, t . What is the dependent variable? Explain. © MP.3

- 16. Vocabulary** Identify the *independent variable* and the *dependent variable* in the situation below.

The number of laps you swim, s , and the time, t , you spend swimming.

- 17. Higher Order Thinking** Ivan says that length, l , can be used as either an independent or a dependent variable. Give an example in which length, l , is a dependent variable. Then describe another situation in which it is an independent variable.

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- 18.** The cost, c , of a hamburger at a restaurant depends on other factors at the restaurant.

PART A

Name two independent variables on which the cost of a hamburger might depend.

PART B

Identify the dependent variable and the independent variable in this sentence.

The owner of Arlo's Hamburger Hut records the total income from hamburger sales, s , and the total number of hamburgers sold, h .

