Name _____ Date _____ Class _____

CHAPTER 4

Project

Is That Your Foot?

Activity 1: Walk-a-thon *Use after Lesson 4-4*

By measuring how far you can walk in 1 minute, you can make predictions about how far you can walk in longer periods of time.

1. Use a stopwatch to time yourself as you walk for 1 minute. Walk comfortably without rushing. Measure the distance you walked in feet.

_____

2. Multiply the distance by 60 to estimate how many feet you can walk in 1 hour. Then convert feet to miles to find your walking rate in miles per hour.

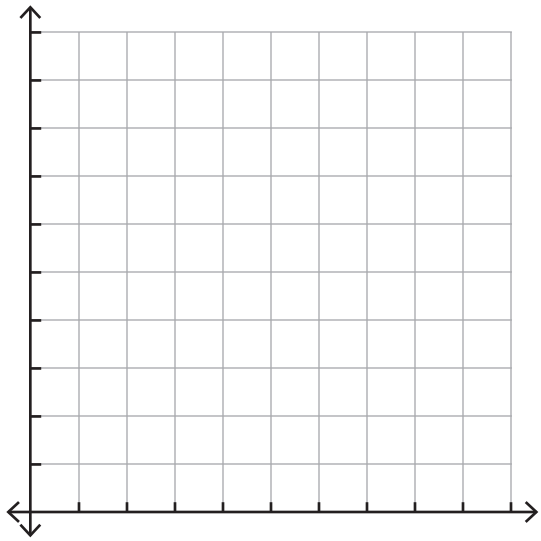
_____

3. The function $y = rx$ describes the distance y in miles you can walk in x hours, where r is your rate in miles per hour. Rewrite this function using your rate from Problem 2.

_____

4. Use the function to make a table of ordered pairs. Then graph the ordered pairs. Draw a line through the points to show all the ordered pairs that satisfy the function.

x	$y = rx$	(x, y)
1		
3		
5		
7		
9		



5. Use your graph to predict how far you could walk in an 8-hour walk-a-thon.

_____

Name _____ Date _____ Class _____

CHAPTER 4

Project

Is That Your Foot? continued

Activity 2: Scene of the Crime *Use after Lesson 4-5*

Is there a correlation between a person's height and foot length? If so, you can use this correlation to predict a person's height when you know the length of his or her footprint.

1. Work with a partner. Measure the length of your foot in centimeters.

_____

2. Measure your height in centimeters.

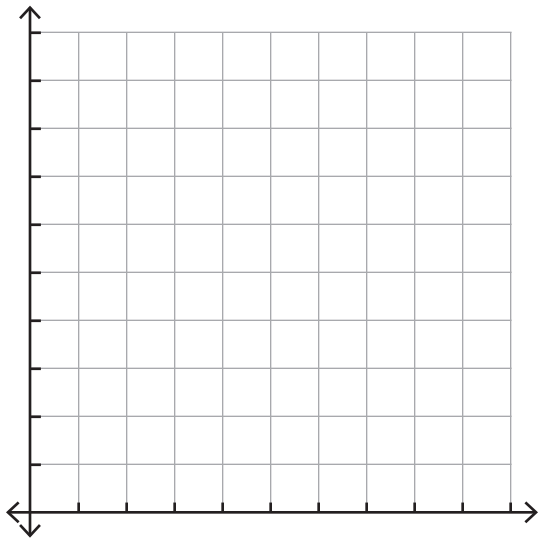
_____

3. Collect data from your classmates to complete the table.

Height (cm)	Foot Length (cm)

Height (cm)	Foot Length (cm)

4. Graph a scatter plot of the data, and draw a trend line.



5. Describe the correlation illustrated by your scatter plot.

_____

6. A set of footprints left at a crime scene measure 24 cm in length. Based on your scatter plot, estimate the height of the person who left the footprints. Explain how you determined your answer.

_____

_____

_____