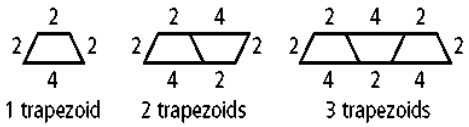
Name _____ Class _____ Date _____

Extra Practice (continued)

Chapter 4

Lesson 4-2

8. For the diagram below, find the relationship between the number of shapes and the perimeter of the figure they form. Represent this relationship using a table, words, an equation, and a graph.



Trapezoids	1	2	3	4	5	6	10	■	*n*
Perimeter	10	16	■	■	■	■	■	112	■

For each table, determine whether the relationship is a function. Then represent the relationship using words, an equation, and a graph.

9. Rainfall

Hours Raining	Total Rainfall (in.)
0	0
1	1.3
2	2.6
3	3.9

10. Paint in Can

Area Painted (ft^2)	Gallons of Paint
0	4.5
100	4.2
200	3.9
300	3.6

11 Grocery Bill

Gallons of Milk	Total Bill
0	$35.27
1	$38.56
2	$41.85
3	$45.14

Name _____ Class _____ Date _____

Extra Practice (continued)

Chapter 4

Lesson 4-3

Graph the function shown by each table. Tell whether the function is *linear* or *nonlinear*.

12.

x	y
0	–2
1	1
2	4
3	7

13.

x	y
0	–1
1	–1
2	–1
3	–1

14.

x	y
0	0
1	–1
2	3
3	5

Each set of ordered pairs represents a function. Write a rule that represents the function.

15. $\left(1,\frac{1}{2}\right),\left(2,\frac{1}{4}\right),\left(3,\frac{1}{8}\right),\left(4,\frac{1}{16}\right),\left(5,\frac{1}{32}\right)$

16. (0, 0),(1, –3),(2, –12), (3, –27), (4, –48)

Lesson 4-4

Graph each function.

17. $y = 2x + 1$

18. $y = 4 - x$

Make a table of values and graph each function.

19. The function $f(x) = 175 + x$ represents the amount of money in a savings account that started with $175 after a deposit of x dollars.

20. The function $f(x) = 4x$ represents the perimeter of a square with side length x.