Skill: Variables, Tables, and Graphs

Variables and Patterns

Complete each table given the rule.

Rule: Output = Input · 5

1.

Input	1	2	3	4	5
Output	5	10	15		

Rule: Output = Input · 2

2.

Input	10	20	30	40	50
Output	20	40	60		

Rule: Output = Input + 3

3.

Input	3	4	5	6	7
Output	6	7	8		

Graph the data in each table.

4.

Hours	Wages
1	$15
2	$30
3	$45
4	$60
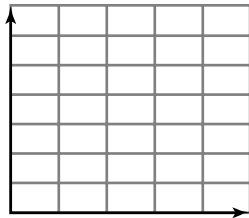
5.
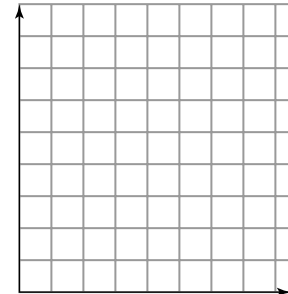
Gallons	Quarts
1	4
2	8
3	12
4	16
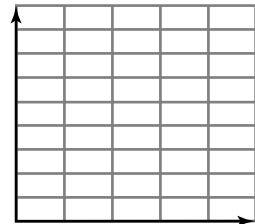
6. A parking garage charges $3.50 per hour to park. The equation $c = 3.5\,h$ shows how the number of hours h relates to the parking charge c. Graph this relationship.

Use the expression to complete each table.

7.

x	$x + 7$
2	9
5	12
8	
11	
	21

8.

x	$5x$
3	
6	
9	
12	
	75

9.

x	$125 - x$
15	
30	
45	
60	
	50

Skill: Variables, Tables, and Graphs (continued)

10. A cellular phone company charges a $49.99 monthly fee for 600 free minutes. Each additional minute costs $0.35. This month you used 750 minutes. How much do you owe?

Write a rule for the relationship between the variables represented in each table.

11.

x	y
1	6
2	7
3	8
4	9

12.

x	y
1	4
2	8
3	12
4	16

13.

x	y
1	4
2	7
3	10
4	13

14. A typist types 45 words per minute.

a. Write a rule to represent the relationship between the number of typed words and the time in which they are typed.

b. How many words can the typist type in 25 minutes? Write and solve an equation to answer this.

c. How long would it take the typist to type 20,025 words?