

LESSON
2-2

Constant Rates of Change

Practice and Problem Solving: D

Use the table to determine whether the relationship is proportional. If so, write an equation to show the relationship between the two quantities. Tell what each of the variables you used represents. The first one has been done for you.

1.

Teams	1	2	3	4
Number of Players	6	12	18	24

- a. Proportional? yes
- b. Equation: $y = 6x$
- c. Number of teams: x
- d. Number of players: y

2.

Time (h)	1	2	3	4
Cars Washed	3	6	9	12

- a. Proportional? _____
- b. Equation: _____
- c. Number of hours: _____
- d. Cars washed: _____

3.

Weight (lb)	3	4	5
Cost (\$)	2.25	3.00	3.75

4.

Time (min)	2	3	4
Songs Played	10	14	20

The following tables show proportional relationships. Find the constant of proportionality, k . Then write an equation to show the relationship between the two quantities. Tell what each of the variables you used represents. The first one has been done for you.

5.

Apples	5	10	15	20
Bags	1	2	3	4

$k = \frac{1}{5}$

$y = \frac{1}{5}x;$

$x = \text{apples}; y = \text{bags}$

6.

Cartons	1	2	4	5
Eggs	12	24	48	60

$k =$ _____
