

Homework Lesson 2.5.2
Name:
Two Equations for Each Relationship

1. The soccer team makes \$5 for each t-shirt they sell. Use n for the number of t-shirts and d for the number of dollars to write the two equations representing the relationship between d and n . If you get stuck, build a table with some examples to help you see the relationships. Remember the unit rates (how many for one) can be helpful.

2. In 8 seconds, Jerome can walk 20 meters. Use m for the number of meters and s for the number of seconds to write the two equations representing the relationship between m and s . If you get stuck, build a table with some examples to help you see the relationships. Remember the unit rates (how many for one) can be helpful.

3. Below is a table relating p , the number of pages Jana read, to n , the number of minutes she was reading.
 - a. Fill in the missing values.

number pages p	number of minutes n
9	7
	1
1	
5	
	11

- b. Write the two equations that represent the relationship between the number of pages and the number of minutes.

4. A chef uses the formula $m = 1/2 w$ to prepare oatmeal. It represents the relationship between the number of cups of oatmeal m and the number of cups of water w . What does $1/2$ stand for in this situation? Express your answer as a rate.

5. The two equations relating inches of snow i and hours of snowfall h are

$$i = \frac{3}{4} h \quad \text{and} \quad h = 1\frac{1}{3} i$$

- a. Describe what $3/4$ means in the first equation. Include the units in your answer.
- b. Describe what $1\frac{1}{3}$ means in the second equation. Include the units in your answer.
6. The table represents a proportional relationship. Find the constant of proportionality and write an equation to represent the relationship.

a	y
12	9
5	$3\frac{3}{4}$
3	$2\frac{1}{4}$
1	$\frac{3}{4}$

Constant of proportionality: _____

Equation: $y =$

1. Each table represents a proportional relationship. For each table:
- a. Fill in the missing parts of the table.

- b. Draw a circle around the constant of proportionality.

x	y
2	10
	15
7	
1	

a	b
12	3
1	
	10
20	

m	n
1	
10	
	18
5	3