NAME _____

Lesson 4.3 Constants of Proportionality

A unit rate can also be called a **constant of proportionality**. The constant of proportionality describes the rate at which variables in an equation change.

x	2	3	5	6
y	6	9	15	18

Step 1: Set up an equation in which the constant (k) is equal to $y \div x$.

Step 2: Check the equation across multiple points to verify the constant.

Step 3: $6 \div 2 = 3$; $9 \div 3 = 3$; $15 \div 5 = 3$; $k = 3$

Find the constant of proportionality for each set of values.

a **b**

1.

x	1	2	3	8
y	1.5	3	4.5	12

$k =$ _____

x	0.4	0.8	1.4	1.8
y	2	4	7	9

$k =$ _____

2.

x	1	2	2.5	3.5
y	2	4	5	7

$k =$ _____

x	4.5	6	10.5	12
y	7.5	10	17.5	20

$k =$ _____

3.

x	2	4	6	8
y	1	2	3	4

$k =$ _____

x	10	20	30	40
y	2	4	6	8

$k =$ _____