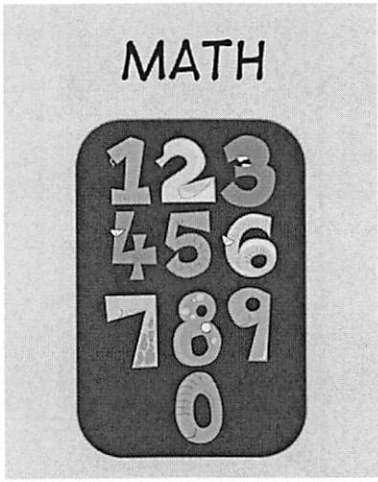
ROAD BRANCH ELEMENTARY & MIDDLE SCHOOL

NTID/SNOW DAY PACKETS



Math 8

Day 5

NAME _____

Lesson 4.3 Constants of Proportionality

Find the constant of proportionality for each set of values.

1.

a

x	2	4	6	8
y	1	2	3	4

$k =$ _____

b

x	2	4	6	8
y	3	6	9	12

$k =$ _____

2.

x	1	3	5	7
y	5	15	25	35

$k =$ _____

x	4	8	12	20
y	5	10	15	25

$k =$ _____

3.

x	3	5	7	9
y	18	30	42	54

$k =$ _____

x	0.5	2	6	8
y	0.25	1	3	4

$k =$ _____

4.

x	1	2	3	4
y	4	8	12	16

$k =$ _____

x	3	6	9	12
y	4	8	12	16

$k =$ _____

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 $x \div y$.

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

Step 3: $2 \div 6 = \frac{1}{3}$; $3 \div 9 = \frac{1}{3}$; $5 \div 15 = \frac{1}{3}$; $k = \frac{1}{3}$

Find the constant of proportionality for each set of values.

a

1.

x	1.5	3	4.5	12
y	1	2	3	8

$k =$ _____

b

x	2	4	7	9
y	0.4	0.8	1.4	1.8

$k =$ _____

2.

x	2	4	5	7
y	1	2	2.5	3.5

$k =$ _____

x	7.5	10	17.5	20
y	4.5	6	10.5	12

$k =$ _____

3.

x	1	2	3	4
y	2	4	6	8

$k =$ _____

x	2	4	6	8
y	10	20	30	40

$k =$ _____