Unit: Rates and Percents
Student Handout 4

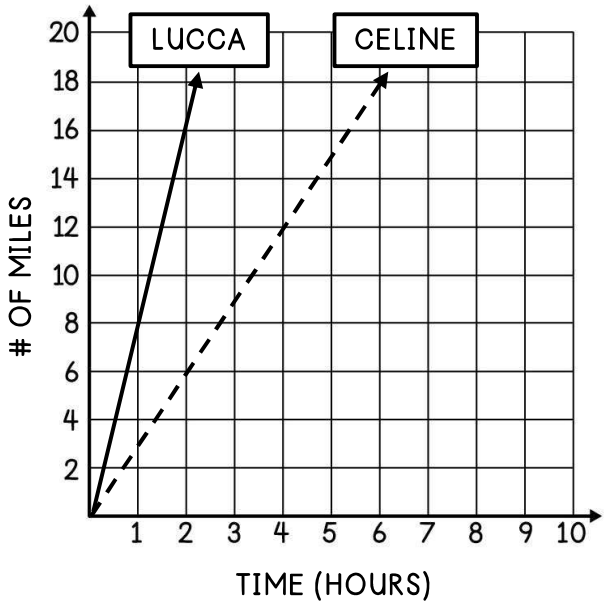
Name _____

Date _____Pd_____

REPRESENTING RATES

Use the information below to represent a rate on a graph, in a table, and as an equation.

1. Lucca and Celine travel on the same trail. Lucca rides his bike, while Celine walks. Use the data in the graph at the right to complete the multiple representations of their rate of speed.



LUCCA

HOURS	MILES

CELINE

HOURS	MILES

a. The unit rate is the value of y at the point (1, y). Using the graph above, what is the unit rate at which Lucca travels?

b. What is the unit rate at which Celine travels?

c. How much further does Lucca travel in two hours than Celine? After 15 hours, how many miles will Lucca and Celine each travel?

d. Write an equation to represent Lucca and Celine's rate of speed.

LUCCA

CELINE

2. Veronica is looking for a bakery to buy cupcakes for a baby shower. She wrote equations to represent the price per cupcake. Order the bakeries from greatest to least cost per cupcake.

JUNE'S CAFE
$t = 3.75c$

SUGAR LOVE
$t = 2.9c$

LAVENDER FARM
$t = 3.5c$

A group of friends recorded their cumulative number of steps on five days during the month of June. Determine the unit rate from the tables below.

3.

HOLLY

DAY	STEPS
1	4,000
2	8,000
3	12,000
4	16,000
5	20,000

unit rate: _____

4.

ELIAS

DAY	STEPS
2	5,000
4	10,000
6	15,000
8	20,000
10	25,000

unit rate: _____

5.

RICKY

DAY	STEPS
4	12,800
6	19,200
10	32,000
16	51,200
24	76,800

unit rate: _____

6.

YUVAL

DAY	STEPS
3	9,450
5	15,750
7	22,050
9	28,350
11	34,650

unit rate: _____

7. Order the friends' daily step rate from least to greatest.

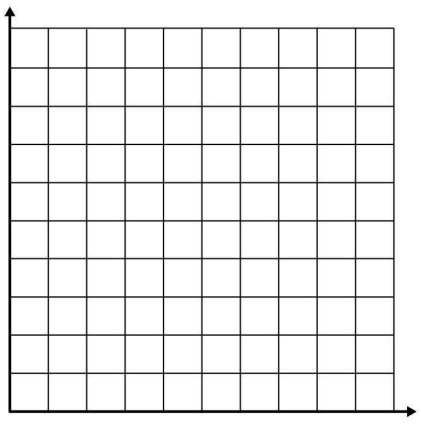
8. Teri observed a fast food drive-through window for 4 mornings. She wrote equations to represent the average minutes per customer order for each morning. Determine the unit rate for each of the 4 mornings and fill in the table below.

DAY	Monday	Tuesday	Thursday	Friday
EQUATION	$t = 5.5m$	$t = 5m$	$t = 4\frac{2}{5}m$	$t = 6m$
UNIT RATE				

The unit rate is the value of y at the point (1, y). Determine the unit rates of the equations below using the graphs.

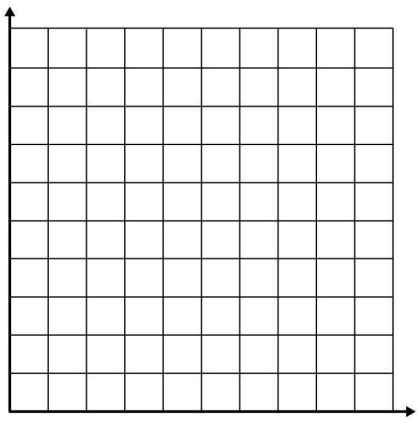
9. $y = 2x$

unit rate: _____



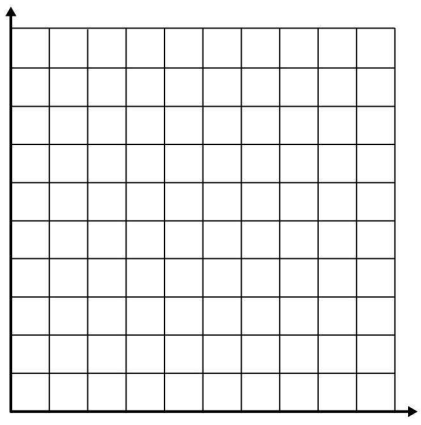
10. $y = 6x$

unit rate: _____



11. $y = 3.5x$

unit rate: _____



Unit: Rates and Percents
Homework 4

Name _____

Date _____Pd_____

REPRESENTING RATES

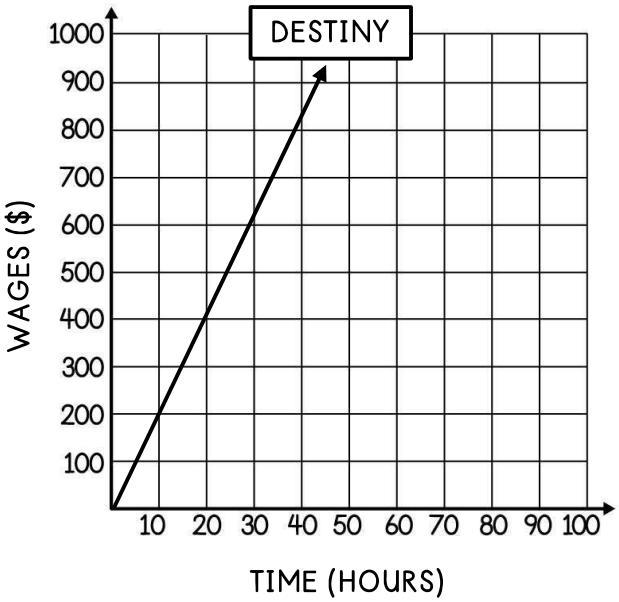
The wages of four employees in the mail department are represented below. Use the information to answer the questions.

STEPH

HOURS	WAGES
15	$157.50
18	$189.00
21	$220.50
24	$252.00
27	$283.50

LAYLA Owner; She pays herself twice the sum of the other employees' weekly wages.

MARCO $w = 9h$



1. If *h* represents hours and *w* represents wage, then how much more does Steph earn per hour than Marco?

2. What is Destiny's hourly wage?

3. If both Destiny and Steph work 35 hours, how much more will Destiny earn?

4. One week, Steph worked 20 hours, Marco worked 12 hours, and Destiny worked 32 hours. How much did the owner, Layla, pay herself?

5. Last week, Layla paid herself $1,439. If Steph worked 15 hours and Destiny worked 20 hours, how many hours did Marco work last week?