

Assignment Record Sheet

Math Core C

Full Name: _____ **Week: 1/6 - 1/10**

Unit Name: Comparing and Scaling Periods: 3 & 5

Date Assigned	Focus Question??	Homework (IP=in packet)		Meets Expectation (15 points)	Approaching Expectations (5 points)	Below Expectation (0 points)
Monday Jan. 6	<i>What do different comparisons of quantities tell you about their relationship?</i>	WU: None CW: Math Review HW: None		WU: CW: HW:		
Tuesday Jan. 7	<i>What do different comparisons of quantities tell you about their relationship?</i>	WU: Vocabulary (IP) CW: Prob. 1.1 A-B p. 8 Video Launch HW: ACE #1 (IP)		WU: CW: HW:		
Wed. Jan. 8	<i>What strategies do you use to determine which mix is the most orangey?</i>	WU: Vocabulary (IP) CW: Prob. 1.2 A-B p. 11 HW: ACE #10 (IP)		WU: CW: HW:		
Thursday Jan. 9	<i>When you scale up a recipe and change the units, like from cups to ounces, what are some of the issues you have to deal with?</i>	WU: Vocabulary (IP) CW: Prob. 1.3 A p. 13 Video Launch HW: ACE #13-15 p. 23		WU: CW: HW:		
Friday Jan. 10	<i>When you scale up a recipe and change the units, like from cups to ounces, what are some of the issues you have to deal with?</i>	WU: Vocabulary (IP) CW: Prob. 1.3 B-D p. 13 HW: None Turn in your packet		WU: CW: HW:		

Total Homework Score for the Week: _____/75

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Daily Materials Score _____/25

Comparing and Scaling

Complete the vocabulary chart by filling in the missing information.

Term	Definition	Example
ratio	A comparison of two quantities expressed with a phrase such as "3 for every 5".	$3:5$ $\frac{3}{5}$
part-to-part ratio	A part-to-part ratio represents a relationship between one part of a whole and another part of the whole.	2 cans of juice concentrate and 3 cans of water. 2:3
part-to-whole ratio	A part-to-whole ratio represents a relationship between one part of a whole and the whole.	2 cans of juice concentrate and 3 cans of water. 2:5 and 3:5
equation	A rule containing variables that represent a mathematical relationship.	$\frac{2}{7} = \frac{x}{42}$
proportion	An equation stating that two ratios are equal.	
rate	A comparison of quantities measured in two different units.	4 cookies per child

Comparing and Scaling (continued)

Term	Definition	Example								
rate table	A table that shows you the value of a single item in terms of another.	<p>Movie Tickets</p> <table border="1"> <tr> <td># of People</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Price</td> <td>\$12</td> <td>\$24</td> <td>\$36</td> </tr> </table>	# of People	1	2	3	Price	\$12	\$24	\$36
# of People	1	2	3							
Price	\$12	\$24	\$36							
unit rate	A rate in which the second number (the denominator) is 1.	<p>3 flavors of ice cream</p> <hr/> <p>1 banana split</p>								
constant of proportionality	The constant ratio of two proportional quantities, x and y ; usually written as $y = kx$, where k is the constant proportionality.	$y = \frac{3}{4}x$ <p>$\frac{3}{4}$ is the constant proportionality.</p>								
commission	The amount earned, based on the percent of total sales.	A salesperson who earns 10% commission on \$60,000 worth of cars earns a \$6,000 commission.								
markup	The amount added to the buying price of an item.									

Labsheet 1ACE

Exercise 1

1. In a comparison taste test of two juice drinks, 780 people preferred Cranberry Blast. Only 220 people preferred Melon Splash. Complete each statement.

a. There were more people who preferred Cranberry Blast.

(HINT: How many people preferred Cranberry Blast and how many preferred Melon Splash?).

b. In the taste test, % of the people preferred Cranberry Blast.

(HINT: What was the total number of people who participated in the taste test?)

c. People who preferred Cranberry Blast outnumbered those who preferred Melon Splash by a ratio of to .

(HINT: Remember that a ratio is a comparison. The problem is asking you to compare people who preferred Cranberry Blast to people who preferred Melon Splash by writing a ratio.)

h/w

Labsheet 1ACE

Exercise 10

10. Compare these four mixes for apple juice.

<p><u>Mix W</u></p> <p>5 cups concentrate 8 cups cold water</p>	<p><u>Mix X</u></p> <p>3 cups concentrate 6 cups cold water</p>
<p><u>Mix Y</u></p> <p>6 cups concentrate 9 cups cold water</p>	<p><u>Mix Z</u></p> <p>3 cups concentrate 5 cups cold water</p>

a. Which mix would make the most "appley" juice? Explain your reasoning.
 (HINT: What would make a juice more "appley?")

b. Suppose you make a single batch of each mix (W, X, Y, and Z). What fraction of each batch is concentrate?
 (HINT: What is the total number of cups added to each batch?)

Mix W:

Mix X:

Mix Y:

Mix Z:

Labsheet 1ACE

Exercise 10

c. Rewrite your answers to part (b) as percents.

Mix W:

Mix X:

Mix Y:

Mix Z:

d. Suppose you make only 1 cup of Mix W. How much water and how much concentrate do you need?

(Hint: For Mix W, the current batch makes 13 cups, where there are 5 cups concentrate and 8 cups water.)

What fraction of the mix is water?

How can you then determine how much concentrate and water you need to get only one total cup?

Now answer the question: How much water and how much concentrate do you need?