

Name: _____ Period: _____

Week 13 Homework Packet – 7th Grade Math

Score

/4

Week Score

/12

Stamp

ASSIGNMENT DUE TUESDAY, NOVEMBER 1, 2016

Unit 2, Chapter 1 – Ratios and Proportional Reasoning

For each problem below, show all work. You will not receive a stamp if work is not shown.

1) A worker paints two-thirds of a fence in a half-hour. How long will it take her to paint the entire fence?

In one-quarter of an hour, a runner runs $1\frac{3}{4}$ miles.

2) What is the runner's average speed in miles per hour?

3) If the runner keeps up that pace for an hour and a half, how many miles will he have run?

Carla bikes to work. She works $3\frac{1}{2}$ miles from home and it takes her one-third of an hour to get there.

4) What is her average speed in miles per hour?

5) If she rode at this pace for a half hour, how many miles would she ride?

Skills Review

Evaluate the following. An example has been done for you. ***Show all work!***

Ex.) $\frac{1}{6} + \frac{3}{8} =$

$LCD = 24 \quad \frac{1 \times 4}{6 \times 4} + \frac{3 \times 3}{8 \times 3} = \frac{4}{24} + \frac{9}{24} = \frac{13}{24}$

6) $\frac{2}{5} + \frac{1}{3} =$

7) $\frac{3}{5} - \frac{1}{4} =$

8) $\frac{2}{9} + \frac{1}{6} =$

9) $\frac{3}{4} + \frac{5}{6} =$

10) $\frac{7}{10} + \frac{4}{15} =$

ASSIGNMENT DUE WED/THU. NOVEMBER 2/3. 2016

Unit 2, Chapter 1 – Ratios and Proportional Reasoning

Convert the following units by filling in the fractions with the appropriate conversion. A conversion table is provided at the bottom of the page. One problem has been done for you.

Ex.) Convert 10 minutes into seconds

$$\frac{10 \cancel{\text{min.}}}{1} \times \frac{60 \text{ sec.}}{1 \cancel{\text{min.}}} = 600 \text{ sec.}$$

1) Convert 180 seconds into minutes

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

2) Convert 8 yards into feet

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

3) Convert 42 days into weeks

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

4) Convert 9 kilometers into meters

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

5) Convert 1,300 centimeters into meters

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Skills Review

Evaluate the following. Remember, only find the reciprocal of the second fraction when converting division into multiplication. ***Show all work!***

6) $\frac{9}{20} \times \frac{5}{12}$

7) $\frac{6}{5} \div \frac{16}{15}$

8) $\frac{8}{9} \div \frac{4}{15}$

9) $\frac{3}{10} \times \frac{4}{9}$

10) $\frac{2}{9} \div \frac{12}{21}$

Conversions

60 seconds = 1 minute	12 inches = 1 foot
60 minutes = 1 hour	3 feet = 1 yard
24 hours = 1 day	100 centimeters = 1 meter
7 days = 1 week	1000 meters = 1 kilometer

Name: _____ Period: _____

7th Grade Math

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/4

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ASSIGNMENT DUE FRIDAY, NOVEMBER 4, 2016

Unit 2, Chapter 1 – Ratios and Proportional Reasoning

Convert the following by using the conversion chart at the bottom of the page, as well as the previous page. Show how to set up the problem using the technique we learned in class.

You will need a calculator. Round all answers to two decimal places if necessary.

- 1) Convert 20 miles per hour to feet per second

- 2) Convert 30 miles per gallon to kilometers per liter.

- 3) Convert 3 weeks into hours

- 4) Convert 14,400 seconds into hours

- 5) Convert 2.3 kilograms per liter into pounds per gallon.

- 6) Convert 860 grams into pounds.

Find each unit rate. Round all answers to two decimal places when necessary. You will need a calculator.

- 7) 175 miles in 4 hours
_____ miles per hour

- 8) \$17 for four bags of chips
_____ dollars per bag

- 9) A set of 6 barbells weighs 90 pounds
_____ pounds per barbell

- 10) A cheetah runs 200 meters in 7 seconds
_____ meters per second

- 11) A car drives 326 miles on 9.3 gallons of gas
_____ miles per gallon

- 12) In an eight-hour work day, a building uses 24,000 gallons of water.
_____ gallons per hour

- 13) A baby panda will grow 40 kilograms in the first 12 months of its life.
_____ kilograms per month

Conversions

2.54 centimeters = 1 inch 3.79 liters = 1 gallon
2.205 pounds = 1 kilogram 1000 grams = 1 kilogram