Student: _____ Date: _____	Instructor: Ray Brown Course: M050 Sum17 CAI 10052 G43	Assignment: ch06_7rev HW

1. Click the link below to watch a video reviewing concepts in this chapter. You are encouraged to watch the video and work problems with the instructor to help ensure your understanding of the material.

   Chapter 6/7 Review[1]

   ○   True - I understand the concept.
   ○   False - I am not understanding the concept and intend to seek assistance.

   1: http://www.screencast.com/t/hdgCN7IxsCg7

   Answer: True - I understand the concept.

2. Find the unit ratio.

   165 to 30

   The unit ratio is _____   (Simplify your answer. Type an integer or a decimal.)

   Answer: 5.5

3. **Reminder Online Students** - Prior to the taking the chapter 6/7 post-test you should try to communicate with your instructor via Zoom Link[2] or other synchronous platform. Knowing how to use this tool will allow you to work directly with your instructor online.

   Fill in the blank.

   A _____ rate is a rate expressed as a fraction with a denominator of 1.

   A (1) _____ rate is a rate expressed as a fraction with a denominator of 1.

   2: https://zoom.us/j/6262283505

   (1)   ○   price
         ○   unit
         ○   reduced

   Answer: (1) unit

4. A car is driven 420 miles in 14 hours. What is the rate in miles per hour?

   The rate is _____ mph.
   (Simplify your answer.)

   Answer: 30

5. Determine if the given equation is a proportion.

$$\frac{42}{12} \stackrel{?}{=} \frac{7}{3}$$

Choose the correct answer below.

○ The proportion $\frac{42}{12} \stackrel{?}{=} \frac{7}{3}$ is a false proportion.

○ The proportion $\frac{42}{12} \stackrel{?}{=} \frac{7}{3}$ is a true proportion.

Answer: The proportion $\frac{42}{12} \stackrel{?}{=} \frac{7}{3}$ is a false proportion.

6. Determine if the given equation is a proportion.

$$\frac{6\frac{1}{2}}{2\frac{1}{6}} \stackrel{?}{=} \frac{3\frac{5}{6}}{1\frac{7}{14}}$$

Is the given equation a proportion?

○ No
○ Yes

Answer: No

7. Solve the given proportion.

$$\frac{-14}{y} = \frac{-7}{2}$$

y = _____
(Simplify your answer. Type an integer or a decimal rounded to the nearest tenth as needed.)

Answer: 4.0

8. Solve the given proportion.

$$\frac{-3.7}{-2.3} = \frac{x}{5.4}$$

x = _____
(Simplify your answer. Type an integer or a decimal rounded to the nearest tenth as needed.)

Answer: 8.7

9. Solve the given proportion.

$$\frac{\frac{2}{6}}{-\frac{2}{6}} = \frac{n}{\frac{6}{4}}$$

n = _____
(Type an integer or a simplified fraction.)

   Answer: $-\dfrac{3}{2}$

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10. Every $1\dfrac{1}{4}$ inches on a wilderness map represents 1 mile. If the actual distance between two lakes is 20 miles, how far apart are the lakes on the map?

The lakes are _____ inches apart on the map.
(Simplify your answer.)

   Answer: 25

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11. Suppose 38 lbs of coffee beans are required to produce 2 lbs of Farmer's coffee. How many lbs of coffee beans are required to produce 437 lbs of Farmer's coffee?

437 lb of Farmer's coffee is produced from _____ lb of coffee beans.

   Answer: 8303

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12. A recipe that serves 8 people requires $1\dfrac{1}{2}$ cups of sugar. Using this recipe, how many cups of sugar are needed to serve 10 people?

_____ cups of sugar are needed to serve 10 people.
(Simplify your answer. Type an integer, proper fraction, or mixed number.)

   Answer: $1\dfrac{7}{8}$

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13. Convert the length as indicated.

715 kilometers to hectometers

715 kilometers = _____ hectometers
(Type an integer or a decimal.)

   Answer: 7,150

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14. Convert the length as indicated.

    15.96 meters to kilometers

    15.96 meters = _____ kilometers
    (Type an integer or a decimal.)

    Answer: 0.01596

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15. Convert as indicated.

    19 in to cm

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    19 in ≈ _____ cm (Round to the nearest hundredth.)

    Answer: 48.26

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16. Convert the length as indicated.

    170 yards to meters.

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    170 yd = _____ m (Round to two decimal places as needed.)

    Answer: 155.96

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17. Convert the length as indicated.

    90 miles to kilometers

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    90 mi = _____ km
    (Simplify your answer. Type a whole number or decimal rounded to the nearest hundredth as needed.)

    Answer: 145.16

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18. Change 8% to a fraction or mixed number.

    8% = _____ (Simplify your answer.)

    Answer: $\dfrac{2}{25}$

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19. Write the following percent as a fraction or mixed number in simplest form.

    760%

    760% = _____

    Answer: $\dfrac{38}{5}$

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20. Write the percent as a decimal.

     78%

78% = _____ (Simplify your answer. Type an integer or a decimal.)

    Answer: 0.78

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21. Write the percent as a decimal.

     0.4%

0.4% = _____

    Answer: 0.004

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22. Write the following fraction as a percent.

$$\frac{3}{10}$$

$\frac{3}{10}$ = _____ % (Type an integer or a simplified fraction.)

    Answer: 30

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23. Write the fraction as a percent. Answer as an integer or mixed number.

$$1\frac{1}{9}$$

$1\frac{1}{9}$ = _____ %
(Simplify your answer. Type an integer or mixed number.)

    Answer: $111\frac{1}{9}$

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24. Write the following decimal as a percent.

     0.072

0.072 = _____ % (Simplify your answer.)

    Answer: 7.2

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25. Find the unknown value below.

     What number is 40% of 87.5?

     _____ is 40% of 87.5.
     (Simplify your answer. Type an integer or a decimal.)

     Answer: 35

26. Find the unknown value below.

     115% of what number is 23?

     115% of _____ is 23.
     (Simplify your answer. Type an integer or a decimal.)

     Answer: 20

27. Find the unknown value below.

     11.5 is what percent of 20?

     11.5 is _____ % of 20.
     (Simplify your answer. Type an integer or a decimal.)

     Answer: 57.5

28. Find the unknown value below.

     What percent is 22 of 88?

     _____ % of 88 is 22.
     (Simplify your answer. Type an integer or a decimal.)

     Answer: 25

29. A lamp on a clearance table is marked at 60% off. If the regular price is $81.90, find the discount and the sale price.

     The discount is $ _____ .
     (Type an integer or a decimal.)

     The sale price is $ _____ .
     (Type an integer or a decimal.)

     Answers 49.14

              32.76

30. A student got a $12.50 discount on a new backpack. If the discount rate is 50%, find the original price of the backpack.

The original price of the backpack is $ _____ .
(Type an integer or a decimal.)

Answer: 25