

# Math 6 - Unit 2: Ratios, Rates, Proportions

## End of Unit Test – STUDY GUIDE

Name: \_\_\_\_\_

Class Period: 1 2 3 4 Date: \_\_\_\_\_

### Vocabulary

Define the following terms:

1) customary system \_\_\_\_\_

2) metric system \_\_\_\_\_

3) percent \_\_\_\_\_

4) proportion \_\_\_\_\_

### Problem Solving. Show your work!

5) The ratio of whale sharks to dolphins at the Georgia Aquarium is 1 to 2. Based on that information, what is the missing value in the table?

Whale Sharks	1	6	5	10
Dolphins	2		10	20

6) 14 is 20% of what number?

7) What is 60% of 400?

8) Which value of x will make these ratios equivalent?  $\frac{12}{6} = \frac{x}{7}$

9) Alyssa pays \$48 for 8 tickets to the new Avengers movie. Write the ratio as a unit rate.

10) Jessica drove 288 miles in 4 hours. Oscar drove 189 miles in 3 hours. Who drove at the faster rate of speed?

11) Stacy the snake is 3 feet long. Owen the fish is 49 inches long. How much longer is Owen than Stacy?  
(1 foot = 12 inches)

12) The table below shows the number of tickets sold for each movie.  
What does the ratio 5:2 represent?

<b>Item</b>	Avengers	Thor	Captain America	Spider Man
<b>Quantity Sold</b>	12	15	30	10

- 13) The ratio of red to blue socks in a drawer is 8:12. If there are 80 socks in the drawer, how many are blue?
- 14) The ratio of boys to girls in a class is 4:5. If there are 36 total kids in the class, how many boys are in the class?
- 15) There are 80 people eating in a Chinese restaurant. If 25% of these people did **NOT** order an eggroll, how many people did order an eggroll?
- 16) Janiah went out to dinner with her friends and had great service. She wanted to leave a 20% tip on her \$39 bill. How much money will she leave as a tip?
- 17) The prices of 3 different bottles of shampoo are given in the table. Which size bottle is the **cheapest**, according to the price per ounce?

Size	Price	Price per 1 ounce
25 ounces	\$5.25	
15 ounces	\$2.40	
5 ounces	\$1.00	

- 18) The weight of an elephant is 13 kg. How many grams does the elephant weigh? ( $1 \text{ kg} = 1000 \text{ g}$ )
- 19) Seventy liters of soda were served at a party. How many kiloliters were served? ( $1000 \text{ L} = 1 \text{ kL}$ )
- 20) If 1 Ton is equal to 2,000 pounds, how many Tons are equal to 17,000 pounds?
- 21) The table shows survey results of the favorite desserts of 6th graders. What is the simplified ratio of those who selected ice cream **and** cake **to** total?

Dessert	Ice Cream	Cookies	Cake	Pie	Brownies	Other
# Votes	15	13	5	2	8	7