

**Adv Math 6 - Unit 2: Ratios, Rates, Proportions** Name: \_\_\_\_\_

End of Unit Test Study Guide

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

**Answer the following questions on a separate sheet of paper and turn in with all work shown to get full credit.**

- 1) What is the difference between a rate and a unit rate?
- 2) Is  $\frac{12}{18} = \frac{5}{8}$  a proportion? Why or why not? How do you know?
- 3) Fill in the missing values in the ratio table:

5	15		100
	9	27	

- 4) 19 is 20% of what number?
- 5) Find 30% of 400
- 6) Determine the missing value:  $\frac{25}{15} = \frac{x}{9}$
- 7) Write the rate as a unit rate (including units): \$31.50 for 9 tickets
- 8) Maren drove 245 miles in 3.5 hours. Donika drove 427 miles in 7 hours.

8a) Who drove at the fastest rate of speed? \_\_\_\_\_

8b) Justify your answer: \_\_\_\_\_

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- 9) Ephraim the Snake is 3 feet long. Asia the Fish is 49 inches long.  
How much longer is Asia than Ephraim?
- 10) The table below shows the number of tickets sold for each movie.  
What does the ratio 5:3 represent?

Item	Avengers	Thor	Captain America	Spider Man
Quantity Sold	12	15	30	10

- 11) The table below shows the cost for varying numbers of meals at a local restaurant. If the ratio stays the same, determine the value of  $n$ .

Number of Meals	Cost
3	\$36
5	\$60
12	\$144
20	$n$

- 12) 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?
- 13) 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?
- 14) David deposited \$312 in the bank last week. If this was 20% of his paycheck, how much was his paycheck?
- 15) Mrs. Katz is saving for a beach vacation. She needs to save \$3,500. If she has only saved 30% of that amount, how much has she saved?
- 16) The prices of 3 different bottles of salad dressing are given in the table. Which size bottle is the BEST value, according to the price per ounce?

Size	Price
20 ounces	\$4.20
15 ounces	\$2.25
5 ounces	\$0.90

- 17) The weight of a rhinoceros is 8 kg. If there are 1000 grams in a kilogram, how many grams does the rhinoceros weigh?
- 18) Sixty liters of fruit punch were served at a party. If there are 1000 liters in a kiloliter, how many kiloliters were served?
- 19) If you spend \$30 on dinner out and want to leave a 20% tip for good service, what would your total bill be?
- 20) If a store sells a shirt for \$16 and you have a 20% off coupon, how much would you pay for the shirt before taxes?
- 21) How much would you pay for the shirt in question #20 including 6% sales tax?