**Math 6/7 and Adv. Math 6– Unit 2: Rate, Ratio, and Proportional Reasoning**

**Test Review** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is a ratio? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. What are some differences between the Metric and Customary Systems? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Write two equivalent ratios to 6:9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Twenty-one is 30% of what number? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Find 110% of 54. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Determine the missing value. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Write the ratio as a unit rate: $62 for 4 tickets \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Analee drove 165 miles in 2.5 hours. Miller drove 192 miles in 3 hours. Who drove at the fastest rate of speed? How do you know?
7. If 1 inch is approximately 2.54 centimeters, how many centimeters are equal in length to 8.5 inches?
8. The table below shows the number of each item sold at the concession stand. What might the ratio 4:3 represent?

|  |  |
| --- | --- |
| Item | Quantity Sold |
| Popcorn | 20 |
| Nachos | 15 |
| Hot Dog | 25 |
| Candy Bar | 30 |

1. The ratio of boys to girls in a class is 5:3. If there are 32 students in the class, how many are boys?
2. In a class of 36 students, 75% returned their permission slips for the school field trip. How many students did not return their permission slips?
3. The table below shows the cost for varying number of books. If the rate stays the same, determine the value of *n*.

|  |  |
| --- | --- |
| Number of Books | Cost |
| 5 | $12.50 |
| 8 | $20 |
| 12 | *n* |
| 15 | $37.50 |

1. Bothers Middle School held a car wash as a fundraiser. Out of the 45 vehicles that were washed, 60% were SUVs. How many of the vehicles were SUVs?
2. The graph below compares cups to pints. Which of the following ordered pairs would also satisfy this relationship?



|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| A. | (4, 2) | B. | (2, 4) | C. | (2, 0) | D. | (1, 2) |

1. Ella’s paycheck last week was $115. She would like to put 20% of her earnings in her savings account. How much money should she put in her savings account?
2. The prices of 4 different bottles of lotion are given in the table. Which size bottle is the worst value? Why?

|  |  |
| --- | --- |
| Size | Price |
| 25 ounces | $4.50 |
| 15 ounces | $2.40 |
| 10 ounces | $1.90 |
| 5 ounces | $0.75 |

1. Pierce drives his race car at a constant speed of 140 miles per hour. How can he calculate long it should take him to travel 700 miles?
2. Mrs. Bothers surveyed her students to determine their favorite summer snack. She teaches 130 students. 70% of them chose ice cream, and 30% chose smoothies. How many more kids chose ice cream over smoothies?
3. The door is 90 inches high. How many feet is this?