***Learning Targets:***

*I can write and simplify a ratio.*

*I can find and use a unit rate.*

*I can apply ratio reasoning to manipulate units to solve real world problems.*

***Mastery Scoring Sheet***

Overall score: \_\_\_\_\_\_\_\_\_\_/12 \_\_\_\_\_\_\_\_\_\_\_\_%

*Learning Target 1: I can write and simplify a ratio.*

Questions: 2, 5, 6

Score: \_\_\_\_\_\_\_\_\_\_\_/ 3 Circle: Met Did not meet

*Learning Target 2: I can find and use a unit rate.*

Questions: 1, 3, 8

Score: \_\_\_\_\_\_\_\_\_\_\_/ 3 Circle: Met Did not meet

*Learning Target 3: I can apply ratio reasoning to manipulate units to solve real world problems.*

Questions: 4, 7, 9

Score: \_\_\_\_\_\_\_\_\_\_\_/ 3 Circle: Met Did not meet

*Short response question: (3 pt. rubric)*

Score: \_\_\_\_\_\_\_\_\_\_\_/ 3

Correct = 3 pts. Partially Correct = 1 OR 2 pts. Incorrect = 0 pts.

Notes:

***Learning Targets:***

*I can write and simplify a ratio.*

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*I can apply ratio reasoning to manipulate units to solve real world problems.*

\_\_\_\_\_\_\_ 1. In 2010, Jerry earned $10.00 for 2 hours of work. Which table shows the relationship between the number of hours worked and Jerry’s total earnings, if the amount earned per hour is constant?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A.   |  |  | | --- | --- | | **Number of Hours** | **Total Earnings** | | 1 | $10.00 | | 2 | $20.00 | | 3 | $30.00 | | 4 | $40.00 | | B.   |  |  | | --- | --- | | **Number of Hours** | **Total Earnings** | | 1 | $10.00 | | 2 | $11.00 | | 3 | $12.00 | | 4 | $13.00 | |
| C.   |  |  | | --- | --- | | **Number of Hours** | **Total Earnings** | | 1 | $10.00 | | 2 | $10.00 | | 3 | $10.00 | | 4 | $10.00 | | D.   |  |  | | --- | --- | | **Number of Hours** | **Total Earnings** | | 1 | $5.00 | | 2 | $10.00 | | 3 | $15.00 | | 4 | $20.00 | |

\_\_\_\_\_\_\_\_2. A bakery sells 5 apple muffins for every 2 bran muffins sold. Which table shows this ratio?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A.   |  |  | | --- | --- | | **Apple** | **Bran** | | 5 | 2 | | 10 | 12 | | 20 | 22 | | B.   |  |  | | --- | --- | | **Apple** | **Bran** | | 5 | 2 | | 18 | 8 | | 20 | 10 | |
| C.   |  |  | | --- | --- | | **Apple** | **Bran** | | 5 | 2 | | 10 | 4 | | 15 | 6 | | D.   |  |  | | --- | --- | | **Apple** | **Bran** | | 5 | 2 | | 4 | 10 | | 15 | 6 | |

\_\_\_\_\_\_\_ 3. Over the course of 7 days Ms. Rabinowitz drove 70 miles. How many miles did she drive per day?

A. 7 miles/day B. 10 miles/day C. 1 miles/day D. 0.7 miles/day

**\_\_\_\_\_\_\_\_** 4.Last year, Chesa made 4 ***one-cup*** servings of soup for a school party. This year, she will make two times the amount of soup that she made last year. How many ***pints*** of soup will Chesa make this year?

A. 2 B. 1 C. 4 D. 6

\_\_\_\_\_\_\_\_ 5. The ratio of students to adults on a field trip is 10 to 1. Which table correctly shows this ratio for each grade?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A.   |  |  |  | | --- | --- | --- | | **Grade** | **Number of Students** | **Number of Adults** | | 6 | 8 | 80 | | 7 | 9 | 90 | | 8 | 10 | 100 | | B.   |  |  |  | | --- | --- | --- | | **Grade** | **Number of Students** | **Number of Adults** | | 6 | 80 | 8 | | 7 | 90 | 9 | | 8 | 100 | 10 | |
| C.   |  |  |  | | --- | --- | --- | | **Grade** | **Number of Students** | **Number of Adults** | | 6 | 80 | 10 | | 7 | 90 | 10 | | 8 | 100 | 10 | | D.   |  |  |  | | --- | --- | --- | | **Grade** | **Number of Students** | **Number of Adults** | | 6 | 96 | 11 | | 7 | 120 | 13 | | 8 | 136 | 15 | |

\_\_\_\_\_\_\_\_ 6. The table below shows different possibilities for the number of games a team would need to win to maintain a certain percentage of wins.

|  |  |
| --- | --- |
| **Number of Games Won** | **Number of Games Played** |
| 3 | 5 |
| 6 | 10 |
| ? | ? |
| 12 | 20 |

Which ratio of the number of games won to the number of games played should also be included in this table?

A. 9:20 B. 15:9 C. 9:15 D. 50:30

**\_\_\_\_\_\_\_\_** 7. The area of an airplane’s wings is related to the airplane’s lifting force, which holds the airplane in the air. The table below lists several wing areas and the corresponding lifting forces.

|  |  |
| --- | --- |
| **Area of Wings**  **(square feet)** | **Lifting Force**  **(pounds)** |
| 100 | 500 |
| x | 1,000 |
| 300 | y |
| 400 | 2,000 |

A. x = 200 square feet and y = 2,00 pounds B. x = 150 square feet and y = 1,500 pounds

C. x = 200 square feet and y = 1,500 pounds D. x = 150 square feet and y = 2,000 pounds

\_\_\_\_\_\_\_\_ 8. Susan reads a book at a rate of 1 page every 3 minutes. If her reading rate remains the same, how long did it take her to read 9 pages?

A. 3 minutes B. 9 minutes C. 27 minutes D. 18 minutes

**\_\_\_\_\_\_\_\_** 9.Fei Yen’s dog eats 8 ***ounces*** of dog food each day. Fei Yen bought a 10-***pound*** bag of dog food. How many 8-***ounce*** servings are in a 10-***pound*** bag of dog food?

A. 2 B. 20 C. 1.25 D. 12.5

10. Jimmy and his family are on their way to visit some family friends who live 780 miles away from them. Based on the route they chose, they expect to complete their trip in 3 days. The distances and average speeds for the first 2 days driven are shown below:

* First day: Drove 240 miles total
* Second day: 6 hours at an average speed of 65 miles per hour

Part A:

What is the total miles that Jimmy’s family has driven after 2 days?

***Show your work:***

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Part B:

If the average speed on the 3rd day is 60 miles per hour, how many more hours will it take them to reach their family friends’ home?

***Show your work:***

Answer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Explain in complete sentences, using your math vocabulary, how you know your answer is correct.

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