***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.*

*I can find and use a unit rate.*

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

\_\_\_\_\_\_\_ 1. In 2010, Jerry earned $17.50 for 2 hours of work. Which table shows the relationship between the number of hours worked and Jerry’s total earnings, if the rate per hour is constant?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A.   |  |  | | --- | --- | | **Number of Hours** | **Total Earnings** | | 1 | $17.50 | | 2 | $35.00 | | 3 | $52.00 | | 4 | $70.00 | | B.   |  |  | | --- | --- | | **Number of Hours** | **Total Earnings** | | 1 | $16.50 | | 2 | $17.50 | | 3 | $18.50 | | 4 | $19.50 | |
| C.   |  |  | | --- | --- | | **Number of Hours** | **Total Earnings** | | 1 | $17.50 | | 2 | $17.50 | | 3 | $17.50 | | 4 | $17.50 | | D.   |  |  | | --- | --- | | **Number of Hours** | **Total Earnings** | | 1 | $8.75 | | 2 | $17.50 | | 3 | $26.25 | | 4 | $35.00 | |

\_\_\_\_\_\_\_\_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** | | 10 | 4 | | 15 | 6 | | 35 | 14 | | D.   |  |  | | --- | --- | | **Apple** | **Bran** | | 20 | 4 | | 30 | 6 | | 40 | 8 | |

\_\_\_\_\_\_\_ 3. Over the course of 7 days Ms. Rabinowitz drove 528.5 miles. She spent $95.99 on gas. How many miles did she drive per day?

A. 13.71 miles/day B. 75.5 miles/day C. 755 miles/day D. 7.55 miles/day

**\_\_\_\_\_\_\_\_** 4.Last year, Chesa made 32 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 gallons of soup will Chesa make this year?

A. 64 B. 16 C. 4 D. 2

\_\_\_\_\_\_\_\_ 5. The ratio of students to adults on a field trip is 8 to 1. Which table correctly shows this ratio for each grade?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A.   |  |  |  | | --- | --- | --- | | **Grade** | **Number of Students** | **Number of Adults** | | 6 | 96 | 88 | | 7 | 120 | 112 | | 8 | 136 | 128 | | B.   |  |  |  | | --- | --- | --- | | **Grade** | **Number of Students** | **Number of Adults** | | 6 | 96 | 12 | | 7 | 120 | 15 | | 8 | 136 | 17 | |
| C.   |  |  |  | | --- | --- | --- | | **Grade** | **Number of Students** | **Number of Adults** | | 6 | 96 | 104 | | 7 | 120 | 128 | | 8 | 136 | 144 | | 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** |
| 6 | 10 |
| 24 | 40 |
| 36 | 60 |
| 42 | 70 |

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

A. 18:20 B. 30:20 C. 18:30 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)** |
| 125 | 1,875 |
| 150 | 2,250 |
| 175 | 2,625 |
| 250 | 3,750 |
| x | 5,625 |
| 420 | y |

A. x = 375 square feet and y = 7,500 B. x = 335 square feet and y = 7,500

C. x = 375 square feet and y = 6,300 D. x = 335 square feet and y = 6,300 pounds

\_\_\_\_\_\_\_\_ 8. Susan reads a book at a rate of 1 page every 3 minutes. If her reading rate remains the same, which method could be used to determine the number of minutes for her to read 18 pages?

A. add 18 and 3 B. divide 18 by 3

C. multiply 3 by 18 D. subtract 3 from 18

**\_\_\_\_\_\_\_\_** 9.Fei Yen’s dog eats 8 ounces of dog food each day. Fei Yen bought a 28-pound bag of dog food. How many 8-ounce servings are in a 28-pound bag of dog food?

A. 14 B. 56 C. 224 D. 448

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: 4 hours at an average speed of 60 miles per hour
* Second day: 6 hours at an average speed of 65 miles per hour

If the average speed on the third day is 60 miles per hour, how many more hour will it take them to reach their family friend’s home?

***Show your work:***

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

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

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_