



## Using Ratio Equations

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

Solve each problem.

**Ex)** For each kilogram there are 1,000 grams. This can be expressed using the equation  $y \times 1,000 = Z$ , where  $y$  is equal to the number of kilograms and  $Z$  is equal to the total number of grams. Using this equation find the total grams in 9 kilograms.

- 1) Every dollar is 4 quarters. This can be expressed using the equation  $y \times 4 = Z$ , where  $y$  is equal to the number of dollars and  $Z$  is equal to the total number of quarters. Using this equation find the total quarters in 7 dollars.
- 2) Every yard is 3 feet. This can be expressed using the equation  $y \times 3 = Z$ , where  $y$  is equal to the number of yards and  $Z$  is equal to the total number of feet. Using this equation find the total feet in 10 yards.
- 3) Every cup is 8 ounces. This can be expressed using the equation  $y \times 8 = Z$ , where  $y$  is equal to the number of cups and  $Z$  is equal to the total number of ounces. Using this equation find the total ounces in 2 cups.
- 4) Every liter is 1,000 milliliters. This can be expressed using the equation  $y \times 1,000 = Z$ , where  $y$  is equal to the number of liters and  $Z$  is equal to the total number of milliliters. Using this equation find the total milliliters in 6 liters.
- 5) Every kilometer is 1,000 meters. This can be expressed using the equation  $y \times 1,000 = Z$ , where  $y$  is equal to the number of kilometers and  $Z$  is equal to the total number of meters. Using this equation find the total meters in 6 kilometers.
- 6) Every quart is 2 pints. This can be expressed using the equation  $y \times 2 = Z$ , where  $y$  is equal to the number of quarts and  $Z$  is equal to the total number of pints. Using this equation find the total pints in 6 quarts.
- 7) Every dollar is 100 pennies. This can be expressed using the equation  $y \times 100 = Z$ , where  $y$  is equal to the number of dollars and  $Z$  is equal to the total number of pennies. Using this equation find the total pennies in 3 dollars.
- 8) Every gallon is 4 quarts. This can be expressed using the equation  $y \times 4 = Z$ , where  $y$  is equal to the number of gallons and  $Z$  is equal to the total number of quarts. Using this equation find the total quarts in 2 gallons.
- 9) Every meter is 100 centimeters. This can be expressed using the equation  $y \times 100 = Z$ , where  $y$  is equal to the number of meters and  $Z$  is equal to the total number of centimeters. Using this equation find the total centimeters in 4 meters.
- 10) Every centimeter is 10 millimeters. This can be expressed using the equation  $y \times 10 = Z$ , where  $y$  is equal to the number of centimeters and  $Z$  is equal to the total number of millimeters. Using this equation find the total millimeters in 7 centimeters.
- 11) Every quarter is 5 nickels. This can be expressed using the equation  $y \times 5 = Z$ , where  $y$  is equal to the number of quarters and  $Z$  is equal to the total number of nickels. Using this equation find the total nickels in 7 quarters.
- 12) Every dollar is 10 dimes. This can be expressed using the equation  $y \times 10 = Z$ , where  $y$  is equal to the number of dollars and  $Z$  is equal to the total number of dimes. Using this equation find the total dimes in 2 dollars.

## Answers

Ex. **9,000**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_



## Using Ratio Equations

Name: **Answer Key**

Solve each problem.

**Ex)** For each kilogram there are 1,000 grams. This can be expressed using the equation  $y \times 1,000 = Z$ , where  $y$  is equal to the number of kilograms and  $Z$  is equal to the total number of grams. Using this equation find the total grams in 9 kilograms.

- 1)** Every dollar is 4 quarters. This can be expressed using the equation  $y \times 4 = Z$ , where  $y$  is equal to the number of dollars and  $Z$  is equal to the total number of quarters. Using this equation find the total quarters in 7 dollars.
- 2)** Every yard is 3 feet. This can be expressed using the equation  $y \times 3 = Z$ , where  $y$  is equal to the number of yards and  $Z$  is equal to the total number of feet. Using this equation find the total feet in 10 yards.
- 3)** Every cup is 8 ounces. This can be expressed using the equation  $y \times 8 = Z$ , where  $y$  is equal to the number of cups and  $Z$  is equal to the total number of ounces. Using this equation find the total ounces in 2 cups.
- 4)** Every liter is 1,000 milliliters. This can be expressed using the equation  $y \times 1,000 = Z$ , where  $y$  is equal to the number of liters and  $Z$  is equal to the total number of milliliters. Using this equation find the total milliliters in 6 liters.
- 5)** Every kilometer is 1,000 meters. This can be expressed using the equation  $y \times 1,000 = Z$ , where  $y$  is equal to the number of kilometers and  $Z$  is equal to the total number of meters. Using this equation find the total meters in 6 kilometers.
- 6)** Every quart is 2 pints. This can be expressed using the equation  $y \times 2 = Z$ , where  $y$  is equal to the number of quarts and  $Z$  is equal to the total number of pints. Using this equation find the total pints in 6 quarts.
- 7)** Every dollar is 100 pennies. This can be expressed using the equation  $y \times 100 = Z$ , where  $y$  is equal to the number of dollars and  $Z$  is equal to the total number of pennies. Using this equation find the total pennies in 3 dollars.
- 8)** Every gallon is 4 quarts. This can be expressed using the equation  $y \times 4 = Z$ , where  $y$  is equal to the number of gallons and  $Z$  is equal to the total number of quarts. Using this equation find the total quarts in 2 gallons.
- 9)** Every meter is 100 centimeters. This can be expressed using the equation  $y \times 100 = Z$ , where  $y$  is equal to the number of meters and  $Z$  is equal to the total number of centimeters. Using this equation find the total centimeters in 4 meters.
- 10)** Every centimeter is 10 millimeters. This can be expressed using the equation  $y \times 10 = Z$ , where  $y$  is equal to the number of centimeters and  $Z$  is equal to the total number of millimeters. Using this equation find the total millimeters in 7 centimeters.
- 11)** Every quarter is 5 nickels. This can be expressed using the equation  $y \times 5 = Z$ , where  $y$  is equal to the number of quarters and  $Z$  is equal to the total number of nickels. Using this equation find the total nickels in 7 quarters.
- 12)** Every dollar is 10 dimes. This can be expressed using the equation  $y \times 10 = Z$ , where  $y$  is equal to the number of dollars and  $Z$  is equal to the total number of dimes. Using this equation find the total dimes in 2 dollars.

## Answers

Ex. **9,000**

1. **28**

2. **30**

3. **16**

4. **6,000**

5. **6,000**

6. **12**

7. **300**

8. **8**

9. **400**

10. **70**

11. **35**

12. **20**