Ratio and Proportion Word Problems

Name: _____   Score: _____

Solve the following ratio and proportion problems and show your workings.

1. A cook uses salt and sugar in the ratio 9 : 2 for a pastasauce.
    If he uses 45 grams of salt, how much sugar will he use?

2. Yesterday it was hot and I felt like having a lime lemonade. In a glass
    I mixed water and lime in the ratio 10 : 1. If I used 0.25 liter of
    water, how may milliliters of lime juice did I mix in?

3. At a farm the ratio of chickens to geese is 25 : 7. If there are 791 geese,
    how many chickens are there at the farm?

4. I played a game many times. I won 35% of the times I played it.
    What is my ratio wins to losses of this game?

5. A boy has 40 red and blue pencils in his pencil case. If the ratio of
    red to blue pencils is 0.15 : 0.35, how many blue pencils does he have?

6. A recipe in a cook book describes a ratio of pepper to salt of 5 : 1.
    If you used 1.5 ounces of pepper, how many ounces of salt would you
    need to use?

Answers

Solve the following ratio and proportion problems and show your workings.

1. A cook uses salt and sugar in the ratio 9 : 2 for a pastasauce. If he uses 45 grams of salt, how much sugar will he use?

   45 ÷ 9 x 2 = 10 grams of sugar

2. Yesterday it was hot and I felt like having a lime lemonade. In a glass I mixed water and lime in the ratio 10 : 1. If I used 0.25 liter of water, how may milliliters of lime juice did I mix in?

   0.25 ÷ 10 = 0.025 liters x 1,000 = 25 milliliters of lime juice

3. At a farm the ratio of chickens to geese is 25 : 7. If there are 791 geese, how many chickens are there at the farm?

   (791 ÷ 7) x 25 = 2,825 chickens

4. I played a game many times. I won 35% of the times I played it. What is my ratio wins to losses of this game?

   35 : 65 equals 7 : 13

5. A boy has 40 red and blue pencils in his pencil case. If the ratio of red to blue pencils is 0.15 : 0.35, how many blue pencils does he have?

   40 ÷ 0.5 x 0.35 = 28 blue pencils

6. A recipe in a cook book describes a ratio of pepper to salt of 5 : 1. If you used 1.5 ounces of pepper, how many ounces of salt would you need to use?

   1.5 ÷ 5 = 0.3 ounces of salt