

RWP-Ratios Word Problems **Answer Key**

1) The fruit basket came with thirty pieces of assorted fruit. It included 10 strawberries, 1 pineapple, 5 apples, 5 pears, 6 apricots, and 3 plums.

Name at least 2 ratios (**there's more than 2**) that 1:3 might describe. **Hint: What fruits makes 1:3?**

It could be: 1. pears to strawberries and apples or apples to strawberries and pears

2. pineapple to plums 1:3

3. strawberries to all fruit = 10 : 30

4. apricots to strawberries, pears (or apples) and plums = 6:18

2) In Tabitha's supply box there were 12 pencils, 1 box of crayons, 2 glue sticks, 1 pair of scissors, and 3 blue pens. What is the ratio of pens to the number of items in the box?

3:19

3) If there are 14 boys and 16 girls in a class, explain how the ratio of boys to girls is 7 to 8.

The ratio is 14:16. When you simplify the ratio by dividing both numbers by 2, you get 7:8

4) A bakery made 50 muffins. 45 of the muffins contained nuts. What is the ratio of the number of muffins without nuts to the number of muffins with nuts?

5:45 which equals 1:9

5) The ratio of boys to girls at the basketball game is 8:5. There are 30 girls.

How many boys are there? How many more boys are there than girls? (Hint: Write ratios as fractions).

$\frac{\text{boys}=8}{\text{girls}=5} = \frac{\text{boys}=x}{\text{girls}=30}$ Multiply top and bottom by 6, so there are **48 boys**; **48 - 30 is 18 more boys**

6) At the bird sanctuary there were a variety of birds in one large area. There were 2 parrots, 4 Blue Jays, 3 toucans, a peacock and many others. Explain why you cannot find the ratio of toucans to all the birds in the sanctuary.

Because we do not know how many “other” birds there are.

7) In a telephone poll, 15 people said they like watching basketball and 1 person said he does not like watching basketball. What is the ratio of the number of people who do not like watching basketball to the total number of people polled?

1:16

8) Pat the Painter mixed 3 pints of yellow paint with 4 pints of green paint to make a nifty new color. He used 27 pints of yellow paint. How many pints of green paint will he need?

$$\frac{\text{yellow} = 3}{\text{green} = 4} = \frac{\text{yellow} = 27}{\text{green} = x}$$

Multiply both top and bottom by 9, and green = 36 pints

9) The ratio of the weight of Meg’s cat to the weight of Anne’s cat is 5:7. Meg’s cat weighs 20 pounds. How much more does Anne’s cat weigh?

$$\frac{\text{Meg's} = 5}{\text{Anne's} = 7} = \frac{\text{Meg's} = 20}{\text{Anne's} = x}$$

Multiply both top and bottom by 4 and Anne’s equals 28;

28 – 20 = Anne’s cat is 8 pounds heavier

10) There were 6 days in July that the temperature reached 110°F, 5 days that reached 105°F, and 4 days that the temperature hit 115°F. What is the ratio of the number of days that the temperature reached 105°F to the number of days that were at least 110°F?

5:6+4=10 5:10 which equals 1:2