Ratio/Proportion Word Problems   Name_____

Set up a proportion to solve each problem, show all work, and label all answers.

1. The ratio of boys to girls is 3 to 2. If there are 12 boys, how many girls are there?

2. It takes one Super Giant Pizza to feed 3 people. If you invite 36 people, how many pizzas will you need?

3. At a recent party, it cost $9.50 for refreshments for 10 guests. At this rate, how much would it cost to have refreshments for 80 guests?

4. Mary has saved $17.50 in the past 3 weeks. At this rate, how much will she save in 15 weeks?

5. Mr. Johnson was paid $190 for a job that required 40 hours of work. At this rate, how much should he be paid for a job requiring 60 hours of work?

6. The park ranger stocks the children's fishing pond keeping a ratio of 4 sunfish to 3 perch. If he puts 300 sunfish into the pond, how many perch should be put into the pond?

7. If two pounds of meat will serve 5 people, how many pounds will be needed to serve 13 people?

8. Jack was planting a tree. He was to dig a hole that was 3 feet deep for every 5 feet of tree height. How deep should he dig the hole for a tree that is 17 feet high?

9. A certain shade of green paint is made from 5 parts yellow mixed with three parts blue. If 2 cans of yellow are used, how many cans of blue should be used?

10. If a 4-pound roast takes 150 minutes to cook, how long should a five-pound roast take?

11. If a jogger runs 2 miles and burns 185 calories, how many calories would he burn jogging 3 miles?

12. The ratio of the cost of a tennis racket to tennis balls is 18:1. If a can of balls cost $5.35, what is the cost of the racket?

13. Curtis School has 1,575 students. The student to teacher ratio is 15 to 1. How many teachers are at Curtis School?

14. A recipe calls for 2 ½ cups of flour to make 2 dozen cookies. How many cups of flour would be required to bake 15 dozen cookies?

15. A meteorologist reports that the ratio of snowfall in January to total snowfall during the average winter is 2 to 5. If 34 inches have fallen in January of the current year, find the predicted total snowfall for the entire winter.

16. Because of slumping sales, a small company had to lay off some of its employees. The ratio of total employees to employees laid off is 5 to 1. Find the total number of employees if 22 are laid off.

17. A crew of loggers cleared $\frac{1}{2}$ acre of lumber in 4 days. How long will it take the same crew to clear $2 \frac{3}{4}$ acres of lumber?

18. A person who weighs 200 pounds on Earth would weigh about 32 pounds on the moon. Find the weight of a person on Earth who would weigh 15 pounds of the moon.

19. A pump can fill a 750-gallon tank in 35 minutes. How long will it take to fill a 1000-gallon tank with this same pump?

20. In a public opinion poll, 624 people from a sample of 1,100 indicated they would vote for a specific candidate. How many votes can the candidate expect to receive from a population of 40,000?