Fraction Word Problems

1. Scientists say we should sleep \( \frac{3}{8} \) of a day. How many hours a day is this?

2. A recipe for soup calls for \( 4 \frac{3}{4} \) cup of water, \( \frac{1}{2} \) teaspoon of salt, and \( 2 \frac{1}{2} \) cups of mixed vegetables. If the recipe yields two servings, how much of each ingredient would be needed to make four servings?

3. One ibuprofen tablet contains \( \frac{1}{5} \) of a gram of active ingredient. If 1 gram = 1000 milligrams, how many milligrams are there in three tablets?

4. At a party, the girls ate \( 3 \frac{1}{2} \) pizzas and the boys ate \( 7 \frac{1}{2} \) pizzas. How many pizzas were eaten at the party?

5. My recipe calls for \( \frac{2}{3} \) cups of white flour and \( 2 \frac{1}{5} \) cups of whole-wheat flour. How much flour do I need in total for my recipe?

6. A sheet of paper has dimensions \( 8 \frac{1}{2} \) inches by 11 inches. How many square inches is the paper?

7. We had \( 1 \frac{2}{5} \) of a pizza left when we went to bed. The next morning, \( \frac{3}{4} \) of what was left had been eaten. How much pizza is left?

8. We had \( 1 \frac{2}{5} \) of a pizza left when we went to bed. The next morning, \( \frac{3}{4} \) of the remaining pizza had been eaten. How much pizza is left?

9. Alexander is building shelves that are exactly \( 15 \frac{5}{8} \) inches long. How many of these shelves can be cut from a piece of wood that is 75 inches long?

10. McDonalds sell milkshakes in two sizes. A small milkshake contains 300ml and a large milkshake contains \( \frac{2}{3} \) more. How much does a large milkshake contain? If Mr Murrin drinks \( \frac{2}{3} \) of a small milkshake and Miss Hoyne drinks \( \frac{1}{2} \) of a large milkshake, who drinks the most?

11. Willow bought \( 12 \frac{3}{4} \) yards of fabric and used \( 5 \frac{1}{2} \) yards for a pair of curtains and \( 2 \frac{5}{12} \) yards for a tablecloth. How much fabric does she have left over?

12. A track is \( \frac{1}{3} \) of a mile long. How many times does Jose have to run around the track if he wants to run 6 miles?

13. An equilateral triangle has a side length of \( 3 \frac{5}{6} \) inches. What is the perimeter of the triangle?

14. A gasoline additive is used at a rate of \( 2 \frac{3}{4} \) gallon for each storage tank. If \( 230 \frac{1}{2} \) gallons of additive are available, how many storage tanks can receive the additive?

15. Sales tax in Augusta is \( \frac{7}{100} \) of the cost of a non-food item. How much is the sales tax on a $25 shirt?

16. The directions on a bottle of plant food call for \( \frac{1}{2} \) teaspoon in two quarts of water. How much plant food is needed for five quarts?
17. Janelle runs the $2\frac{1}{2}$ mile circuit at Lake Olmstead twice in the morning and $1\frac{3}{5}$ times in the afternoon. How many miles does she run in a day?

18. Which goes further, a bus traveling for $3\frac{1}{2}$ hours at 58 mph or a bus traveling for $5\frac{1}{4}$ hours at 39 mph?

19. Steve is making frames. He uses $\frac{1}{3}$ of a piece of molding to make each frame. How many frames can he make out of 13 pieces of molding?

20. Tara is using boards and cement blocks to make shelves for her dorm room. Each shelf uses $\frac{1}{2}$ of a board and 2 cement blocks. If Tara has 7 boards and 16 cement blocks, how many shelves can she make?

21. Debbie is making a Halloween costume for her daughter and needs $4\frac{3}{8}$ yards of gold trim and $3\frac{7}{8}$ yards of pink trim. If the trim costs $2 a yard, how much will both trims cost?

22. Steve’s gas tank holds 12 gallons of gas. The gas gauge shows the gas tank is $\frac{1}{8}$ full. If Steve is attending a pool tournament that takes $3\frac{1}{2}$ gallons of gas to go to and from the tournament site, how much gas will he need to buy to go to the tournament and return?

23. During September, Riley traveled a total distance of 180 miles to go back and forth to work. In August, he traveled $\frac{5}{6}$ of that distance going back and forth to work. In July, he traveled $\frac{3}{4}$ of August’s distance to go back and forth to work. How many miles did Riley travel in all during those three months?

24. A store sold $\frac{5}{8}$ of its 48 rose plants at the full price of $24 and sold the rest for $\frac{2}{3}$ of the full price. How much money did they take in for the rose plants?

25. A hospital nurse ordered 18 yards of tubing for nebulizers. She used all but $1\frac{1}{16}$ yard of the tubing in one month. How much did she use during that month?

26. A Magic Square has rows and columns that add to be a constant number. In the case below, each row and column should add to be 1. Fill in the remaining fractions.

27. A trip to Columbus, GA, which is 270 miles away, takes Joe $3\frac{3}{4}$ hours. What is Joe’s average speed?

28. There are 117 mg of cholesterol in $4\frac{1}{3}$ cups of milk. How much cholesterol is there in 1 cup of milk?

29. How many pieces of pipe $3\frac{1}{5}$ inches long can be cut from a pipe 6 feet long?

30. If it rained $1\frac{1}{4}$ inch on Monday, $2\frac{3}{8}$ inches on Tuesday, and $1\frac{5}{16}$ inches on Wednesday, what is the total rainfall amount for those three days?