

Simplify all answers and show your work!

1. What is a common denominator for $2\frac{5}{6} + 3\frac{5}{8}$? _____
2. Fill in the blank: $\frac{5}{7} = \frac{\quad}{28}$
3. In a number (such as in “ten and seven tenths”), the term “and” means _____
4. To multiply or divide mixed numbers, it’s best to first change them into _____ before trying to multiply or divide.
5. In the division problem $5\frac{7}{10} \div 2\frac{3}{5}$, what value represents the amount that we are starting with? _____
6. In a word problem, the word “of” many times symbolizes which operation? _____

7. Simplify: $\left(\frac{2}{5}\right)^2 \cdot \frac{5}{6}$

8. Multiply: $4\frac{3}{4} \cdot 5\frac{1}{3}$

9. Divide: $5\frac{7}{10} \div 2\frac{3}{5}$

10. Multiply: $\frac{15}{16} \cdot \frac{8}{25}$

11. Add:
$$\begin{array}{r} 3\frac{2}{3} \\ + 5\frac{4}{9} \\ \hline \end{array}$$

12. Subtract:
$$\begin{array}{r} 9\frac{1}{8} \\ - 5\frac{3}{4} \\ \hline \end{array}$$

13. Subtract:
$$\begin{array}{r} 12 \\ - 6\frac{5}{8} \\ \hline \end{array}$$

14. Write 0.32 as a simplified fraction
15. Write $<$ or $>$ to make a true statement: $\frac{13}{18}$ _____ $\frac{8}{11}$

16. Round \$153.7652 to the nearest cent.

17. Simplify: $\sqrt{\frac{36}{49}}$

18. How many $1\frac{1}{2}$ fluid ounces doses of medicine are in a bottle containing 12 fluid ounces of medicine?

19. Karl needs rubber tubing to fix some automobiles that have been brought into his shop. He needs $4\frac{1}{2}$ feet for one car, $5\frac{3}{4}$ feet for a second car, and $4\frac{2}{3}$ feet for a third car. How much tubing does he need to complete all three jobs?

20. For a bake sale, Amy decided to bake nut bread and a cake. For the bread she needed $3\frac{1}{2}$ cups of flour. For the cake she needed $1\frac{2}{3}$ cups of flour. She had only $3\frac{1}{4}$ cups of flour on hand. How much more flour did she need?

21. The car you want to buy sells for \$22,000. The dealer requires you to make a down payment of $\frac{1}{20}$ of the selling price and finance the remaining amount. How much money is required for a down payment?

22. How many pieces of yarn **exactly** $5\frac{1}{2}$ inches long can be cut from a 72-inch piece of yarn?

23. In a hospital pharmacy, a certain drug is mixed with $1\frac{2}{3}$ cups of saline to make an injectable solution. How much saline would be needed to mix half of the amount of solution originally called for?

24. As a treat for her 6 cats, Nancy opens 2 cans of cat food and puts the food in equal portions on three plates.

a) What fraction of a can does Nancy put on each plate?

b) What fraction of a can does each cat eat if each cat eats the same amount of food?

25. On an Augusta map, one inch represents a half of a mile. How many miles does $5\frac{1}{4}$ inches represent on the map?

26. On this test, numbers 18 through 26 are word problems. What fraction of this test is word problems?