

Show all your work on the following problems. Do not use a calculator. Box your answer. Write your remainders as a fraction.

1. $563 \div 7 =$

2. $923 \div 12 =$

3. $81 \cdot 409 =$

4. $333 \cdot 978 =$

Add and subtract the following fractions. Show your work. Simplify your answers

5.

$$\begin{array}{r} \frac{2}{5} \\ + \frac{1}{3} \\ \hline \end{array}$$

6.

$$\begin{array}{r} 2\frac{1}{6} \\ + 3\frac{1}{2} \\ \hline \end{array}$$

7.

$$\begin{array}{r} \frac{7}{9} \\ - \frac{1}{6} \\ \hline \end{array}$$

8.

$$\begin{array}{r} 5\frac{3}{4} \\ - 1\frac{2}{7} \\ \hline \end{array}$$

Simplify the following fractions to their most simplified form (lowest terms).

9. $\frac{42}{56} =$

10. $\frac{32}{48} =$

11. $\frac{36}{54} =$

12. $\frac{30}{50} =$

Find the equivalent fractions. Fill in the missing value.

13. $\frac{6}{14} = \frac{\quad}{28}$

14. $\frac{36}{60} = \frac{12}{\quad}$

15. $\frac{5}{8} = \frac{\quad}{32}$

16. $\frac{99}{900} = \frac{11}{\quad}$

17. Change the following mixed numbers to improper fractions: $7\frac{3}{5} =$ $1\frac{15}{16} =$

18. Change the following improper fractions to mixed numbers: $\frac{28}{9} =$ $\frac{34}{5} =$

Circle the correct answer.

19. Is 71 **prime** or **composite** ? 20. Is 56 **prime** or **composite** ? 21. Is 80 **prime** or **composite** ?

22. Circle the **perfect squares** (square numbers) 26 25 30 121 40 1 38

In problems 23 and 24 find the **Greatest Common Factor** of each pair. **Show your thinking.**

23. 27 and 63

24. 24 and 36

In problems 25 and 26 find the **Least Common Multiple** of each pair. **Show your thinking.**

25. 8 and 12

26. 50 and 75

Show your thinking for problems 27 and 28.

27. Ariel is making flower arrangements. He has 7 roses and 14 daisies. If Ariel wants to make all the arrangements identical and have no flowers left over, what is the greatest number of flower arrangements that he can make?

28. Hay's Linens sells hand towels in sets of 17 and bath towels in sets of 6. If the store sold the same number of each this morning, what is the smallest number of each type of towel that the store must have sold?