

**Unit 6: Operations with Fractions ~ Review Worksheet**

**Do your work and write answers on a separate sheet of paper.**

**I. Least Common Multiple (LCM)** ~ Find the least common multiple (LCM) for each pair or group of numbers.

1. 3 and 4                      2. 3, 4, and 9                      3. 8, 10, and 12                      4. 5, 6, and 10

**II. Adding, Subtracting, Multiplying, and Dividing Fractions and Mixed Numbers** ~ Find the sum, difference, product, or quotient. Write your answer in simplest form. Show all work.

5.  $\frac{3}{8} + \frac{1}{6}$                       6.  $\frac{1}{2} - \frac{5}{12}$                       7.  $7\frac{4}{7} + 5\frac{4}{5}$                       8.  $7 - 5\frac{2}{9}$
9.  $10\frac{3}{8} - 4\frac{5}{6}$                       10.  $3\frac{1}{5} \cdot \frac{5}{8}$                       11.  $1\frac{7}{10} \cdot \frac{5}{7}$                       12.  $2\frac{1}{5} \cdot 1\frac{1}{4}$
13.  $\frac{4}{7} \div 20$                       14.  $3\frac{1}{2} \div 2\frac{1}{2}$                       15.  $2\frac{1}{3} \div 1\frac{3}{4}$                       16.  $1\frac{1}{6} \div 2\frac{2}{3}$

**III. Solving Fraction Equations: Addition, Subtraction, Multiplication, and Division** ~ Solve each equation. Write the solution in simplest form. Show all work.

17.  $x - 3\frac{3}{4} = 2\frac{5}{12}$                       18.  $x + 6\frac{5}{8} = 11$                       19.  $1\frac{7}{10} = x - 2\frac{4}{5}$
20.  $5\frac{3}{4} = x - \frac{1}{2}$                       21.  $3x = \frac{1}{8}$                       22.  $\frac{1}{4}x = 4$
23.  $\frac{3}{7}x = 14$                       24.  $\frac{x}{7} = 9$                       25.  $\frac{3x}{5} = 6$

**IV. Writing Equations and Solving Word Problems** ~ Read each problem carefully. Write an equation for each. Solve the equation. Write the solution in simplest form. Show all work.

26. Two students in Mrs. Albring's preschool class are stacking blocks, one on top of the others. Reece's blocks are 4 cm high, and Maddy's blocks are 9 cm high. How tall will their stacks be when they are the same height for the first time?

27. Bonnie is making oatmeal bars, and the recipe calls for  $\frac{3}{4}$  cup of brown sugar. If she has  $\frac{1}{3}$  cup brown sugar, how much more does she need?

28. Irena put 10 cups of food in the bird feeder. The birds ate  $3\frac{3}{8}$  cups. How many cups are left?

29. Marco needs to work 40 hours per week. He has worked  $28\frac{7}{8}$  hours so far this week. How many hours does he need to work to meet his 40-hour requirement?

30. A nurse gave a patient  $3\frac{1}{2}$  tablets of a medication. If each table contained  $\frac{1}{20}$  grain of the medication, how much medication did the patient receive?

31. Rhonda put  $2\frac{3}{4}$  pounds of pecans into  $\frac{1}{4}$ -pound bags. How many bags did Rhonda fill?

32. Robert used 3 pints of paint to paint  $\frac{1}{4}$  of the trim in his bedroom. How many pints will Robert use for the trim in his entire bedroom?