

Name \_\_\_\_\_ Per \_\_\_\_\_

Mrs. Doolan /Math6

## Dividing Fractions and Mixed Numbers: Common Denominator Method



**Objective:** You have learned how to add and subtract fractions using common denominators. Now you'll apply that same skill to dividing fractions.



**\*\*To divide fractions and mixed numbers by fractions:**

- 1) Find the LCD for both fractions.
- 2) Create equivalent fractions with the common denominator.
- 3) Convert mixed numbers to improper fractions if needed.
- 4) Divide across the numerators and drop the denominator. The solution's denominator is the number you divide by, not the LCD.
- 5) Simplify if necessary.

### EXAMPLES:

1) Mr. Gow went to his pet store and bought  $6\frac{3}{4}$  pounds of bird food. To fill all his feeders, he needs  $1\frac{2}{3}$  pounds of food. How many times can Mr. Gow fill his feeders?



$$6\frac{3}{4} \div 1\frac{2}{3} = 6\frac{9}{12} \div 1\frac{8}{12} = \frac{81}{12} \div \frac{20}{12} = 81 \div 20 = \boxed{4\frac{1}{20} \text{ times}}$$

2) Tom Brady and his family like to fill baskets with homemade cookies for his teammates during the holidays. If they mix  $8\frac{2}{3}$  gallons of cookie



dough and each batch of cookies takes  $1\frac{1}{5}$  gallons of cookie dough, how many batches can Tom, Gisele, and the kids make?

$$8\frac{2}{3} \div 1\frac{1}{5} = 8\frac{10}{15} \div 1\frac{3}{15} = \frac{130}{15} \div \frac{18}{15} = 130 \div 18 =$$

$$7\frac{4}{18} = \boxed{7\frac{2}{9} \text{ batches of cookies}}$$



YOU TRY:

1)  $3\frac{1}{6} \div 1\frac{2}{9} =$

2)  $4\frac{3}{5} \div 2\frac{1}{3} =$