NAME_____

Module 6 Computational Fluency of Fractions
Lesson 6   Dividing Fractions

Lesson Objectives

- Model division of fractions using diagrams and/or illustrations of manipulatives.
- Develop and use algorithms for dividing fractions.

Subtopic 1   **Dividing Using Models and the Invert-and-Multiply Algorithm**

Two numbers are multiplicative inverses or _____ of each other if their product is 1.

Multiplicative Inverse or Reciprocal

- For a _____ number n, the reciprocal is $\dfrac{1}{n}$.
- Zero does not have a _____.

When dividing a fraction or mixed number by a nonzero _____ _____, multiply the _____ by the reciprocal of the nonzero whole number.

1   Use a model to divide $\dfrac{5}{8}$ into five equal groups.

2   Pedro has $1\dfrac{4}{5}$ hours to study for three tests. If Pedro divides his time equally, how long can he study for each test?

Dividing Fractions Using the Common Denominator
- Write both _____ in terms of a common denominator.
- Divide the _____ .

3 Lewis has $\dfrac{15}{16}$ cup of juice mix. It takes $\dfrac{3}{8}$ cup of mix to make one pitcher of juice. How many pitchers of juice can Lewis make? Use a model.

To divide a fraction, whole number, or mixed number by a _____, multiply the dividend by the _____ of the divisor.