Vocabulary: Dividing Fractions

Vocabulary

- Dividend – the number being divided in a division problem.
  - For example, in the quotient $\frac{2}{5} \div \frac{1}{2} = \frac{4}{5}$, the dividend is $\frac{2}{5}$.
- Divisor – the number by which the dividend is divided in a division problem
  - For example, in the quotient $\frac{2}{5} \div \frac{1}{2} = \frac{4}{5}$, the divisor is $\frac{1}{2}$.
- Fraction – a number that shows the relationship between a part and a whole.
  - A fraction consists of a *denominator* (bottom number) and a *numerator* (top number).
  - An *improper fraction* has a numerator that is greater than or equal to its denominator.
  - An improper fraction can be written as a *mixed number* – a whole number combined with a fraction.
- Quotient – the result of division.
  - For example, the quotient of $\frac{2}{5}$ and $\frac{1}{2}$ is $\frac{4}{5}$, because $\frac{2}{5} \div \frac{1}{2} = \frac{4}{5}$.
- Reciprocal – the result of switching the numerator and denominator of a fraction.
  - For example, $\frac{5}{4}$ and $\frac{4}{5}$ are reciprocals.
  - The product of a number and its reciprocal is always 1.
- Simplify – to reduce in complexity.
  - A simplified fraction is equivalent (equal) to the original fraction but has all common factors divided out of the numerator and denominator.
  - For example, $\frac{6}{12}$ can be simplified to $\frac{1}{2}$ by dividing the numerator and denominator by 6.
  - A fraction is in *simplest form* when the only factor the numerator and denominator have in common is 1.
    - For example, $\frac{1}{2}$ and $\frac{4}{7}$ are in simplest form.