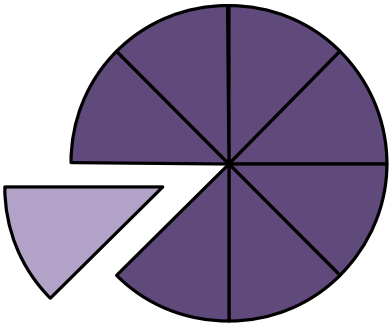
Fix Those Fractions!! Self-Help Guide!

Understanding Fractions

A fraction is a ratio that compares the part to the whole.

Example #1: What does $\frac{1}{8}$ mean?

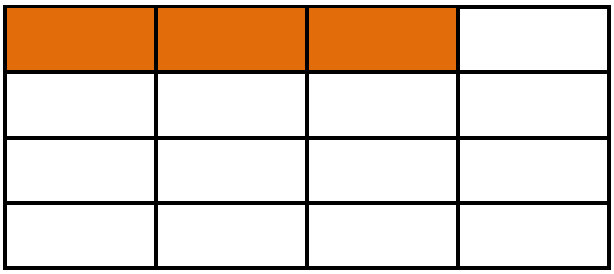
If a pizza is cut into 8 slices that are equal in size, each slice represents $\frac{1}{8}$ of the pizza or 1 slice out of the 8 slices that make up the whole pizza.



$$\frac{\text{1 slice (part)}}{\text{8 slices in (whole)pizza}}$$

Example #2: What does $\frac{3}{16}$ mean?

If three parts are shaded out of the sixteen pieces that make up the whole, then $\frac{3}{16}$ of the rectangle is shaded. Note that each part is congruent (the same shape and same size).



$= \frac{3}{16}$

The number above the fraction bar is the ***numerator***; the number below the fraction bar is the ***denominator***. The fraction bar indicates that the numerator is divided by the denominator.

$$\frac{\text{numerator}}{\text{denominator}} \longleftarrow \div \text{ (divided by)}$$

The fractions shown above are ***proper*** fractions. Their numerators are smaller than their denominators. If the numerator is larger than the denominator, the fraction is ***improper***.

Proper Fraction $\longrightarrow \frac{5}{9}$ Improper Fraction $\longrightarrow \frac{11}{9}$