

KEY TERMS		
Decimal	Improper fraction	Percents
Denominator	Invert	Proper fraction
Dividend	Least common denominator	Proportion
Divisor	Means	Ratios
Extremes	Mixed number	Scored
Factors	Numerator	Whole numbers
Fraction		

WORKING WITH FRACTIONS

A **fraction** is simply a part of a whole. Understanding fractions is important because often a dose that must be administered is not a **whole number**. If we do not understand how fractions function, patients will be in danger of receiving the incorrect dosage.

Suppose you have a whole pizza and want to give some to your friends. You can divide the pizza into slices of varying sizes (Fig. 6-1). For example, you can divide the pizza into three pieces or four pieces; a slice of pizza from the three-piece division is larger than a slice of pizza from the four-piece division. In other words:

$$\begin{aligned} 1/3 &\text{ is greater than } 1/4 \\ 1/4 &\text{ is less than } 1/3 \end{aligned}$$

The number on the top is called the **numerator**. It is part of the whole being divided. The **denominator** is the number on the bottom. It represents the total number of equal parts in the problem.

If the numerator is smaller than the denominator, the fraction is called a **proper fraction** (Fig. 6-2). In the pizza example, if you have three friends and divide the pizza into four pieces, each of your three friends will have a piece, and that leaves one piece (1/4) for you.

FIGURE 6-1: Fractions. Slices of a pie (represented as this circle) divided into three sections are larger than slices of a pie divided into four sections: 1/3 is larger than 1/4.

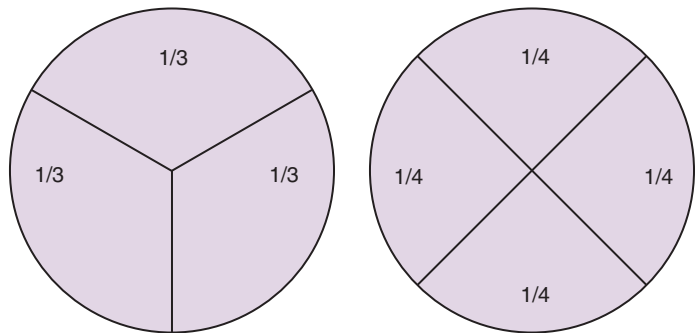


FIGURE 6-2: Proper fraction. This figure shows the proper fraction 2/5. It is a proper fraction because the numerator (top number) is smaller than the denominator (bottom number).

