

**Lesson Summary:**

A fraction whose numerator or denominator is itself a fraction is called a **complex fraction**.

**Recall:** A unit rate is a rate which is expressed as A/B units of the first quantity per 1 unit of the second quantity for two quantities A and B.

For example: If a person walks  $2\frac{1}{2}$  miles in  $1\frac{1}{4}$  hours at a constant speed, then the unit rate is

$$\frac{2\frac{1}{2}}{1\frac{1}{4}} = \frac{\frac{5}{2}}{\frac{5}{4}} = \frac{5}{2} \cdot \frac{4}{5} = 2. \text{ The person walks 2 mph.}$$

**Problem Set**

1. Simplify:  $2\frac{4}{7} \div 1\frac{3}{6}$
2. One lap around a dirt track is  $\frac{1}{3}$  mile. It takes Bryce  $\frac{1}{9}$  hour to ride one lap. What is Bryce's unit rate around the track?
3. Mr. Gengel wants to make a shelf with boards that are  $1\frac{1}{3}$  feet long. If he has an 18 foot board, how many pieces can he cut from the big board?
4. The local bakery uses 1.75 cups of flour in each batch of cookies. The bakery used 5.25 cups of flour this morning.
  - a. How many batches of cookies did the bakery make?
  - b. If there are 5 dozen cookies in each batch, how many cookies did the bakery make yesterday?
5. Jason eats 10 ounces of candy in 5 days.
  - a. How many pounds will he eat per day? (16 ounces = 1 pound)
  - b. How long will it take Jason to eat 1 pound of candy?