

Lesson Summary

A number written in fraction form whose numerator or denominator is itself a fraction is called a *complex fraction*.

If a proportional relationship is given by a description such as, “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

- Determine the quotient: $2\frac{4}{7} \div 1\frac{3}{6}$.
- 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, in miles, around the track?
- 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?
- The local bakery uses 1.75 cups of flour in each batch of cookies. The bakery used 5.25 cups of flour this morning.
 - How many batches of cookies did the bakery make?
 - If there are 5 dozen cookies in each batch, how many cookies did the bakery make?
- Jason eats 10 ounces of candy in 5 days.
 - How many pounds does he eat per day? (Recall: 16 ounces = 1 pound)
 - How long will it take Jason to eat 1 pound of candy?