

Ratios and Rates

- Ratios must be in the same terms.

Example: 5 miles to 8 miles

Notice that “feet to inches” can be made into a ratio by changing the feet into inches. (These are in a conversion chart in your book in section 5.1.)

Example: 2 feet to 9 inches \Rightarrow 24 inches to 9 inches

A ratio of 3 to 7 can be written several different ways:

1) $3 : 7$

2) $\frac{3}{7}$

3) 3 to 7

- Rates have different terms that cannot be made into the same terms.
Example: 4 books to 2 people (Notice that we cannot change books into people! This is not Hogwarts! 😊)

We must label rates!!

1) 5 miles to 8 miles $\Rightarrow \frac{5 \text{ miles}}{8 \text{ miles}} = \frac{5}{8}$ or $5 : 8$ or 5 to 8

2) 2 feet to 9 inches \Rightarrow 24 inches to 9 inches \Rightarrow
 $\frac{24 \text{ in.}}{9 \text{ in.}} = \frac{24}{9} = \frac{8}{3}$ or $8 : 3$ or 8 to 3

3) 4 books to 2 people $\Rightarrow \frac{4 \text{ books}}{2 \text{ people}} = \frac{2 \text{ books}}{1 \text{ person}}$ or 2 books per person

4) 2 books to 4 people $\Rightarrow \frac{2 \text{ books}}{4 \text{ people}} = \frac{1 \text{ book}}{2 \text{ person}}$ or 1 book per 2 people

****Notice the difference between #3 and #4!****