

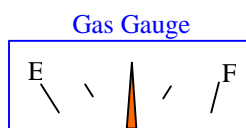
## Fractions

### Why do I have to reduce fractions?

Occasionally you get fractions that accurately represent a situation, but use numbers larger than are really necessary. Reducing makes these fractions more manageable.

#### Example

If your car has a 16 gallon gas tank and the gas gauge needle is in the center, you know that the tank is  $\frac{8}{16}$  full.



The fraction  $\frac{1}{2}$  can be used instead of  $\frac{8}{16}$ . It describes the same amount of gas and it is easier to understand.

#### Example

The teacher of a 2<sup>nd</sup> grade elementary class noted that 4 out of 20 students were absent due to illness.

She could report that, “ $\frac{4}{20}$  of the class was absent.”

You may like this version better: “ $\frac{1}{5}$  of the class was absent.”

#### Conclusion

In both examples, a simpler (reduced) fraction was used in favor of the original fraction.

If you think this sounds like the opposite of creating an *equivalent fraction*, you are correct!

Consider this: If multiplying the numerator and denominator by a common number makes equivalent fractions, then doing exact opposite must *reduce* fractions.

That means you must use *division* to reduce a fraction.