

Unit 0 Lesson III

Unit Conversions with Factor-Label Method

Objective: The student will be able to use the factor-label method and dimensional analysis to interconvert between different units.

Warm - Up Answers

1. 0.450 Liters

2. 0.45063 hg

Unit Conversions
Factor Label

(given, know, need)

Sample Problem #1

The average weight of an African Forest Elephant is 6250 pounds (lbs). How many tons is this?

Sample Problem #2

A cooking pot contains 345 fluid ounces (fl. oz.) of water. How many cups of water is this?

Sample Problem #3

A high school swimmer competes in the 100-meter backstroke event. How many centimeters does this athlete swim?

Sample Problem #4

The same swimmer now competes in a different event, the 350-meter front stroke. How many inches does this athlete swim? (Hint: multi-step problem)