



grams

# Math 1030 #3a <sup>ft<sup>2</sup></sup>

## Units and Conversions

### Conversion Factors

meters

°C

Units describe what is being measured or counted.

We can add or subtract quantities only when they have the same units.

We can multiply and divide quantities even if they have different units.

Unit Conversions are done by multiplying a quantity by the appropriate form of 1. These are called Conversion Factors.

EX 1: Convert

a) 24 feet to yards

b) 2.5 hours to seconds

c) 60 miles per hour to feet per minute

d) 1 ton to ounces

e) 12 gallons to quarts

EX 2: Identify the units in each of these.

a) The rate of flow of a river in which 5000 cubic feet of water flow past a particular location every second.

b) The density of a rock, found by dividing its weight in grams by its volume in cubic centimeters.

EX 3: Given  $1 \text{ meter} = 100 \text{ centimeters}$ , find a conversion between square meters and square centimeters.