1. Convert the following measurements:
   a. 45.3 mm to meters
   b. 10 m to centimeters
   c. 8.43 cm to millimeters
   d. $2.41 \times 10^2$ cm to meters
   e. $1.445 \times 10^4$ m to kilometers

2. How many minutes are in 1 month?

3. For a pharmacist dispensing pills or capsules, it is often easier to weigh the medication to be dispensed than to count the individual pills. If a single antibiotic capsule weighs 0.65 g, and a pharmacist weighs out 15.6 g of capsules, how many capsules have been dispensed?

4. In England, gasoline is sold by the liter. Assume that it takes 10.20 gallons of gasoline to fill the tank of a compact car. How much will it cost to fill up the car if the price of gas is $2.22 per liter in England? (1 L = 0.264 gal)

5. If Thousand Oaks Blvd is 5.3 miles long, how many centimeters long is it? (1 mi = 5280 ft, 1 in = 2.54 cm)

6. Precious metals and gems are measured in troy weights in the English system:
   - 24 grains = 1 pennyweight
   - 20 pennyweight = 1 troy ounce
   - 12 troy ounces = 1 troy pound
   - 1 grain = 0.0648 g
   - 1 carat = 0.200 g
   a. What is 1 troy pound in kilograms?
   b. What is the mass of a troy ounce of gold in grams and in carats?