

**Measurement**

## Quiz 4

"English-metric Conversions, Multidimensional Conversions, Pharmacology"

- 1.) A *meter* is very similar in length to:
  - a) a foot
  - b) an inch
  - c) a yard
  
- 2.) A *liter* is similar in volume (capacity) to a:
  - a) fluid ounce
  - b) gallon
  - c) quart

*Convert each of the following measurements to the indicated unit of measure.*

- 3.) 5 lbs = ? kg (*nearest tenth*)
  
- 4.) 7 liters = ? qts (*nearest tenth*)
  
- 5.) 21 miles = ? km (*nearest tenth*)

*Convert the multidimensional measurements to the indicated units of measure*

- 6.) 100 km/hr = ? miles/hr (*nearest tenth*)
  
- 7.) \$0.39/liter = ? \$/gallon (*nearest penny*)
  
- 8.) \$4/lb = ? \$/oz (*nearest penny*)
  
- 9.) 40 mi/hr = ? ft/sec (*nearest tenth*)
  
- 10.) 5 square feet = ? square inches (*whole number*)

*Solve the pharmacology problems below*

11.) A doctor orders 0.5 grams of medication. The label on the bottle reads 125 mg/tablet. How many tablets will you give?

12.) A solution contains 3 grams of medication in 100 ml of solution. The solution is diluted to 1.5 liters. The diluted solution is to be administered in 7.5 hours.

a.) What is the concentration of the diluted solution in mg/ml?

b.) How would you program a pump to achieve the desired flow rate?

c.) How would you set an IV (with a 15 gtts/ml drip factor) to achieve the desired flow rate?

d.) How many minutes will it take to deliver 500 ml of the solution?

e.) How many mg of drug will the patient receive when they have been given 1 liter of solution?