Math351

Practice Exam #04

| | Round you final answer to the nearest thousandth. |
|----|--|
| 1. | Make the following conversions by multiplying by the appropriate conversion factor |

Note: 12 inches = 1 foot; 3 feet = 1 yard; 5280 feet = 1 mile; 2.54 cm = 1 inch

- a) 500,000 *inches* to miles 7.891 miles
- b) 15 cm to inches 5.906 in

c) $10,000 \ yd$ to miles $\boxed{5.682 \text{ miles}}$

d) 35,000 *sec* to hours 9.722 hours

e) 2 days to sec 172,800.000 sec

2. Make the following conversions by multiplying by the appropriate conversion factor.

Round your answers to the nearest thousandths.

Note: 12 inches = 1 foot; 3 feet = 1 yard; 5280 feet = 1 mile; 2.54 cm = 1 inch

a)
$$12 \frac{\text{mi}}{\text{hr}}$$
 to $\frac{\text{cm}}{\text{sec}}$ 536.448 cm/sec

b)
$$2,000 \frac{\text{cm}}{\text{sec}}$$
 to $\frac{\text{mi}}{\text{hr}}$ 44.739 mi/hr

c)
$$10 \text{ yd}^2$$
 to cm^2 83,612.736 cm²

d)
$$750 \text{ in}^3 \text{ to } \text{ yd}^3 \boxed{0.016 \text{ yd}^3}$$

e)
$$10 \text{ yd}^3$$
 to in^3 466,560.000 in 3

3. Make the following conversions by multiplying by the appropriate conversion factor.

Round your answers to the nearest thousandths. See attached conversion handout!

a) 10 kg to ounces 352.000 oz or 353.357 oz

b) 12 lbs to grams 5454.545 g or 5433.600 g

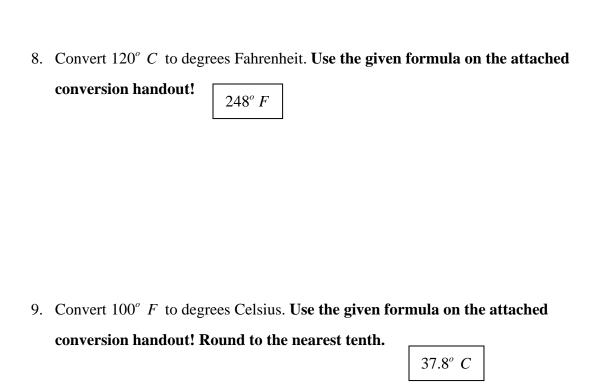
c) 437 cc to liters 0.437 liter

d) 15 L to cups 63.600 cups or 63.325 cups

e) 500 in^3 to milliliters 8,195.000 ml

| 13 crystals = 6 rocks; 8 gems = 26 crystals; 24 pebbles = 3 rocks; 20 gems = 2 diamonds | | |
|---|---|--|
| | 5 Diamonds | |
| | | |
| 5. | A family with a swimming pool puts a chain link fence around the pool. The fence forms a rectangle 14 yards wide and 22 yards long. If the chain-link fence sells for \$2.50 per foot, how much will it cost to fence all four sides of the pool? \$540.00 | |
| 6. | In horse racing, 1 furlong = 220 yards. How many furlongs are in 1 mile? 8 furlongs | |
| 7. | A 5.0 liter engine has a displacement of how many cubic inches? See attached conversion handout! 305.064 in ³ | |

4. Use the following conversions to convert 600 Pebbles to Diamonds.



Conversions Handout

12 inches = 1 foot; 3 feet = 1 yard; 5280 feet = 1 mile; 2.54 cm = 1 inch

Kilometers to meters: 1 km = 1,000 m

Meters to millimeters: 1 m = 1000 mm

Meters to centimeters: 1 m = 100 cm

Meters to decimeters: 1 m = 10 dm

Centimeters to inches: 2.54 cm = 1 in

Milliliters to cubic-inches: $16.39 \text{ ml} = 1 \text{ in}^3$

Milliliters to cubic-centimeters: $1 \text{ ml} = 1 \text{ cc } (1 \text{ cm}^3)$

Milliliters to liters: 1,000 ml = 1 liter

Microliters to liters: 1,000,000 $\mu l = 1$ liter

Quarts to liters: 1.06 qt = 1 liter

Liters to gallons: 3.79 liters = 1 gal

Cups to ounces: 1 cup = 8 oz

Cups to pints: 2 cups = 1 pint

Pints to quarts: 2 pints = 1 quart

Quarts to Gallons: 4 quarts = 1 gal

Pounds to ounces: 1 lb = 16 oz

Tons to pounds: 1 T = 2,000 lb

Grams to ounces: 28.3 g = 1 oz

Grams to kilograms: 1000 g = 1 kg

Pounds to kilograms: 2.20 lb = 1 kg

Fahrenheit to Celsius: $C = \frac{5(F-32)}{9}$

Celsius to Fahrenheit: $F = \frac{9}{5}C + 32$