

Name: _____

Math 10W Chapter 4.1-4.2 Assessment Quiz

*show all of your work.

1. The forecast high temperature for Seattle is 53°F. What is this temperature in degrees Celsius?

$$C = \frac{5}{9} (F - 32)$$

$$C = \frac{5}{9} (53 - 32) = 11.7^{\circ}C$$

2. Water boils at 100°C. What is this temperature in degrees Fahrenheit?

$$F = \frac{9}{5} C + 32$$

$$= \frac{9}{5} (100) + 32$$

$$= 212^{\circ}F$$

3. Which unit – ounce, pound or ton – would you use to express the weight of the following:

a) Dump truck **TON**

b) Dresser **POUND**

c) Frog **OUNCE**

d) Fridge **POUND**

e) Snack size bag of potato chips. **OUNCE**

4. A cylindrical barrel of rainwater has a radius of 1 foot 6 inches and a height of 4 feet. If the barrel is full of water, how much does the water weigh? (1 cubic foot of water weighs about 62 pounds).

$$V = \pi r^2 h$$

$$6'' = 0.5'$$

$$V = \pi (1.5)^2 (4)$$

$$\text{So } 1'6'' = 1.5'$$

$$V = 28.2 \text{ ft}^3$$

$$\text{WEIGHT} = 28.2 \times 62 = 1753 \text{ pounds}$$