

## Basic College Mathematics – Chapter 1 and 2

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. An owner has brought a new dog and its chart from Canada to your clinic. The dog's last weight is 43.5 kg. Using the Unit – Factor (bracket) method, convert the dogs weight to pounds. 1 kg equals 2.2 lbs.
2. There is a container holding 168 fluid ounces of ammonia. How many cups can we get from the container if there are 8 fl. oz. in a cup? Show your work using the Unit – Factor (bracket) method.
3. The Vet has the staff clean up the storage room. We find that we have six bags of dog food. A bag of dog food weighs 10 pounds. Two are  $\frac{3}{4}$  full, two are half-full, one is  $\frac{1}{3}$  full and one is  $\frac{1}{4}$  full. If we combine the dog food, how many bags should we have? How many pounds of dog food should we have?
4. The Vet Tech serves out  $3\frac{1}{2}$  cups of food,  $\frac{1}{2}$  cup of food,  $1\frac{1}{3}$  cup of food,  $1\frac{3}{4}$  cup of food and  $\frac{1}{4}$  cup of food to the animals from the bag. How many cups of food did the Vet tech serve?
5. The Vet tech feeds the baby goats (group A) that are one to three days old 3 fl. oz. of milk four times a day. The one to four week old goats (group B) get 9 fluid ounces three times a day and the baby goats (group C) that are their second month get 12 fluid ounces twice a day. There are 6 baby goats in group A, 9 baby goats in group B, 10 baby goats in group C. How many gallons of milk do we need each day?
6. The Vet is making a vaccine using 2 milliliters of medicine in each shot. There will be 450 horses vaccinated. How many liters of medicine do we order?
7. The Vet tech measures the bottom of the cage at  $24\frac{3}{4}$  inches by  $18\frac{1}{3}$  inches. Area is the length times the width. What is the area of the bottom of the cage in square inches?
8. Fill in the blanks in this culinary story using the appropriate abbreviations. Do not use the same abbreviation twice.

Chef Linda went to the orchard and picked 1 bushel of apples. She stopped at the store and picked up a peck of fresh lemons. Her recipe calls for 9 apples each. However, she computes this to be 4 cups \_\_\_\_\_ of apples, which is a quart \_\_\_\_\_ or 2 pints \_\_\_\_\_. Her recipe calls for  $\frac{1}{2}$ -teaspoon \_\_\_\_\_ of ginger and a teaspoon \_\_\_\_\_ of cinnamon. She also needs 2 tablespoons \_\_\_\_\_ of flour and a tablespoon \_\_\_\_\_ of fresh lemon juice. After serving the pie to the local business council, she signs a contract to deliver pies daily. Now she buys ingredients by the kilogram \_\_\_\_\_, gallon \_\_\_\_\_ and pound \_\_\_\_\_.

9. Find the equivalent

2 cup = _____ pints	1 gallon = _____ cups	6 quarts = _____ pints
6 cups = _____ quarts	3 pints = _____ cups	1 cup = _____ Tbsp
1 quart = _____ pints	16 oz = _____ pounds	2 pints = _____ $\frac{1}{2}$ cups
2 tbsp _____ fl. oz.	1 quart = _____ $\frac{1}{2}$ cups	8 pint = _____ gallons
1 foot = _____ inches	1 pint = _____ fl.oz.	1 ton = _____ pounds
4 gallons = _____ quarts	$\frac{1}{2}$ G = _____ cups	6 tsp = _____ T