#### Culinary Math exercise 3

#### **Convert to a Usable Measure**

20 tbsp. = $1 \frac{1}{4} c$	$0.90 \text{ tbsp.} = 2 \frac{3}{4} \text{ tsp}$		
14 qt. = 3 ½ gal or 3 gal 2 qt	$2.14 \text{ c.} = 2c 2 \text{ tbsp } \frac{3}{4} \text{ tsp}$		
$36 \text{ tsp.} = \frac{34}{2} \text{ c}$	1.2 gal. =1 gal 1 pt 1c 3 tbsp		

### **Recipe Conversions**

The following is a partial list of ingredients for a Vegetable soup recipe that serves 6:

navy beans	6 ounces
chicken stock	2 quarts
red onion, diced	8 ounces
Green beans, cut in ½ inch pieces	1 1/2 cups

How much of each ingredient is required to make 4 servings?

```
navy beans 4 oz
chicken stock 1 qt 1 pt 2/3 c (or 1 qt 2 2/3 c)
red onion 3 ½ oz
green beans 1 c
```

## **Recipe Costing**

$$\frac{quantity}{quantity \ sold} \times \ price \ = cost$$

quantity	item	conversion	Conversion equivalent	price	Quantity sold	Quantity in units sold	Cost in \$
1 cup	milk	n/a	n/a	\$1.50	1 qt	.25	0.38
1 ½ c	h. cream	n/a	n/a	\$2.00	1 pt	.75	1.50
2 tbsp	vanilla	n/a	n/a	\$20.00	1 pt	.0625	1.25
10 oz	flour	n/a	n/a	\$5.00	10 lb	.0625	0.32
2 cups	flour	1 c = 4.5 OZ	9 oz.	\$5.00	10 lb	.056	0.28
2 ½ c	pastry flour	1 c = 4 oz		\$6.00	10 lb	.0625	0.38
1 ¼ c	rice	1 c = 3 oz		\$4.00	5 lb	.047	0.19

Complete the following recipe cost table

Recipe: Vinaigrette Yield: 10 portions

Ingredient	Quantity	Unit Cost	Recipe Cost
EV Olive oil	1 pt	\$12.00/qt	\$6.00
vinegar	½ cup	\$8.00/gal	\$0.25
mustard	3 tbsp.	\$4/8-fl. ounce jar	\$0.75
		TOTAL COST:	\$7.00

What is the cost per portion?  $\$7 \div 10 = \$0.70$ 

# **Recipe Costing**

Complete the following recipe cost table

Recipe: Vegetable Soup

Yield: 6 portions

Ingredient	Quantity	Unit Cost	Recipe Cost
navy beans	12 ounces	\$0.47/lb	\$0.36
chicken stock	3 quarts	\$2.00/gal	\$1.50
red onion, diced	6 ounces	\$0.40/lb	\$0.15
Green beans, cut in ½ inch pieces (1 cup = 5 ounces)	2 cups	\$1.49/lb	\$0.94
		TOTAL COST:	\$2.95

What is the cost per portion? \$0.50