



## Kitchen Economics 101 Worksheet Answer Key

### Part 1 Recipe Yields & Conversion Factors

1. Calculate the yield of the following recipes:

Servings	Serving Size	Yield (oz.'s)	Yield (g/q/oz).
24	6oz..	<b>144</b>	<b>1G 1pt.</b>
36	12oz..	<b>432</b>	<b>3G 1q. 1pt.</b>
120	6oz.	<b>720</b>	<b>5G 2qt. 1pt.</b>

2. Calculate the conversion factors for the following recipes.

**Original Recipe:**

36 12oz. servings

**New Recipes:**

120 8oz.

**Conversion Factor**

**2.2**

36 8oz.

**.66**

200 15oz.

**6.94**

### Part 2 Food Costing and Recipe Costing

3. Cost out the following ingredients keeping in mind the following prices:

Milk	@	\$3.75 g
Cream	@	\$1.25q
Onions	@	.39 lb.
Cilantro	@	.56 bunch
Eggs	@	\$1.19 dz.

		<u>Cost</u>
Milk	12oz.	<b>.348</b>
Cream	16oz.	<b>.624</b>
Onions	2oz.	<b>.048</b>
Cilantro	¼ bunch	<b>.14</b>
Eggs	2 ea.	<b>.198</b>
		<b>(\$1.358 or \$1.36)</b>

**Part 3**  
**Food Cost Percentages and Menu Pricing**

4. Determine the menu price for the following at each food cost percentage.

<u>Ingredient cost</u>	<u>FCP</u>	<u>Menu Price</u>
\$2.34	18%	<b>\$13.00</b>
\$1.19	36%	<b>\$3.30</b>
\$.59	56%	<b>\$1.05</b>
\$1.58	28%	<b>\$5.64</b>

5. Determine the FCP given the following ingredient cost and menu price

<u>Ingredient cost</u>	<u>Menu Price</u>	<u>FCP</u>
\$.98	\$2.39	<b>41%</b>
\$2.98	\$14.95	<b>19.8%</b>
\$1.21	\$5.99	<b>20%</b>
\$1.75	\$7.99	<b>21.9%</b>

**Part 4**  
**Yields, As Purchased and Edible Portion**

6. Determine the AP amount for the following ingredients, given the yield percentage and EP:

<u>Ingredient</u>	<u>%</u>	<u>EP</u>	<u>AP</u>
Broccoli	65	16oz.	<b>24oz</b>
Onion	90	120oz.	<b>133oz</b>
Tomato	90	160oz.	<b>177oz</b>

## **Bringing It All Together Story Problems**

7. You are catering a party for 230 guests. Each guest will drink an average of 2 cups of coffee. One pound of coffee will make 40 cups. The coffee is priced at \$5.95 per pound. Cream for the coffee is \$1.79 per quart. The average guest will use 1 oz. of cream per cup. What is your cost per guest for the coffee?

$$(5.95 \text{ divided by } 40) \times 2^* \quad + \\ (1.79 \text{ divided by } 32) \times 2^* =$$

**..41 cents per guest**

**\*(remember to multiply by two, as each guest will have 2 cups)**

8. You are serving salad at your party for 230 guests. The greens you are using is a mesclun mix that costs \$27.95 per case. Each case will produce 50 salads. The salads will be garnished with teardrop tomatoes. A case of the tomatoes costs \$32.50. Each case contains 8 pints. There are 14 tomatoes per pint. Each salad will contain two tomatoes. The dressing for the salad is balsamic vinaigrette. You purchase the dressing for \$12.95 per quart. Each salad will be dressed with 2 oz. of dressing. What is your total cost for the salad?

$$(27.95 \text{ divided by } 50) \quad + \\ (32.50 \text{ divided by } (14 \times 8) \times 2) \quad + \\ (12.95 \text{ divided by } 32 \times 2) =$$

**\$1.95 per guest**

9. The entree at the dinner is a salmon filet served with a lemon caper sauce. You purchase frozen filets that cost \$69.95 per case. There are 24 filets in each case. Your cost for the lemon-caper sauce is \$4.97 per pint. Each guest will receive 2.5 ounces of sauce on their filet. What is your cost for the entrée?

$$(69.95 \text{ divided by } 24) \quad + \\ ((4.97 \text{ divided by } 16) \times 2.5) =$$

**\$3.67 per guest**

10. Dessert will consist of bananas foster. The cost for the ice cream is \$2.49 per gallon. Each gallon can serve 13 guests. Bananas are .89 cents per pound. Each pound contains 7 bananas. Each guest will receive one half banana per dessert. The banana-rum and sugar ingredients cost \$34.67 for the entire recipe that will serve all 230 guests. What is the cost per guest for dessert?

$$(2.49 \text{ divided by } 13) \quad + \\ ((.89 \text{ divided by } 7) \text{ divided by } 2) \quad + \\ (34.67 \text{ divided by } 230) =$$

**.40 per guest**

11. Arrive at a total cost for menu items and give a total cost per guest based on a 33% food cost percentage.

**.41**  
**1.95**  
**3.67**

$$.40 = \$6.43 \text{ (total cost of ingredients per guest) divided by } .33 \text{ (FCP)} = \quad \mathbf{\$19.48!}$$