**Applied Math for Culinary Management Assignment**

**Each entry (individual or team) will be given 10 minutes to complete the case study. Participants will turn in completed form to evaluators prior to their oral presentation.**

**Situation**: The case study is a scenario of an event in which students must determine food pricing and purchasing. Also, to be taken in account will be the number of people you are serving, the amount of food needed, total food cost, conversion factors, total food cost in recipes, gross profits, and food cost percent. Understanding basic food principle formulas, such as total cost and selling price will be a benefit. Math skills are a must. The questions are asked in short answer form. They also require a reflective short answer piece of the variables in the case study.

You are catering an event for 100 people. Plan to serve 10% over the total count due to last minute RSVP’s. The main course is Phyllo Wrapped Chicken. The recipe yields 14 servings. The cost of one recipe is $ 17.50. Calculate the cost per serving to determine the selling price. You need to obtain a 33% food cost percentage.

How do you determine the cost of each Phyllo Wrapped chicken and what you will charge to meet your cost percent of 33 percent? Base your figures on one recipe yield of 14 servings.

How many Phyllo Wrapped Chicken will you need to prepare?

How many recipes of Phyllo Wrapped Chicken will you need to prepare?

What is your total cost to make the Phyllo Wrapped Chicken?

What must you charge to meet a food cost percentage of 33%?

Based on your calculations, how many Phyllo Wrapped Chicken will the total recipes actually serve?

How many additional people will that serve (as described above)?

Would you modify your recipes to make the amount of Phyllo Wrapped Chicken necessary? Why or why not? What variables about this event might influence your final decisions about pricing and purchasing? What other information might you request from your client

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How do you determine the cost of each Phyllo Wrapped chicken and what you will charge to meet your cost percent of 33 percent? Base your figures on one recipe yield of 14 servings.

How many Phyllo Wrapped Chicken will you need to prepare? 100 + 10% = 110

How many recipes of Phyllo Wrapped Chicken will you need to prepare? 110 / 14 = 7.85; 8 recipes are needed.

What is your total cost to make the Phyllo Wrapped Chicken? 110 x 1.25 = $137.50

What must you charge to meet a food cost percentage of 33%?

Total cost $137.50

Selling price = food cost percent .33 = $416.66; rounded $417.00

Based on your calculations, how many Phyllo Wrapped Chicken will the total recipes actually serve?

8 recipes x 14 servings per recipe = 112 servings

How many additional people will that serve (as described above)?

112-110= 2 additional people

Would you modify your recipes to make the amount of Phyllo Wrapped Chicken necessary? Why or why not? What variables about this event might influence your final decisions about pricing and purchasing? What other information might you request from your client? Answers will vary. Variables may include but are not limited to, the number of guests, the time of day of the event, etc. Students should be able to defend their solutions.