

Math Quiz

1. Q: What is the algebraic formula that is used to calculate food cost?

A: Raw food cost of item / Desired food cost percentage = Price

Example: $\$8.50 / .35 = \24.29

(“How to Price Out Your Menu”, Lorri Mealey, restaurants.about.com/od/menu/a/foodcost.htm)

2. Cost out the following menu item: Penne Pasta with Chicken

Q. What would the menu price be at 30% food cost vs. 25% food cost?

Ingredients	No Recipe Units	Recipe Unit	Cost per Recipe Unit	Extended Cost
Penne Pasta	4.0	oz	\$.30	?
Chicken Breast, Boneless	4.0	oz	\$.27	?
Baby Spinach	1.0	oz	\$.10	?
Parmesan Cheese, grated	.5	oz	\$.30	?
Parsley, chopped	1.0	Tbl	\$.04	?
Sun Dried Tomato Alfredo Sauce	2.5	oz	\$0.5	?

A.

Ingredients	No Recipe Units	Recipe Unit	Cost per Recipe Unit	Extended Cost
Penne Pasta	4.0	oz	\$.30	\$1.20
Chicken Breast, Boneless	4.0	oz	\$.27	\$1.06
Baby Spinach	1.0	oz	\$.10	\$0.10
Parmesan Cheese, grated	.5	oz	\$.30	\$0.15
Parsley, chopped	1.0	Tbl	\$.04	\$0.04
Sun Dried Tomato Alfredo Sauce	2.5	oz	\$0.5	\$0.12

Total cost of the food: \$2.67.

$\$2.67 / .30 = \8.90

$\$2.67 / .25 = \10.68

(www.restaurantowner.com/public/600.cfm)

3. Q. You own a restaurant in the airport and you choose to charge \$15.95 for the above Penne Pasta Chicken despite keeping your food cost to 25%. What might be one key factor that influences your decision to charge customers this price?

A. Demand-Driven Method. This concept is based on the economics of supply and demand. In an airport, people have little choice as to where to eat. The demand for food is

higher than they supply so people are willing to pay for it. However, be careful not to price gauge. Beware of the upper limits that people are willing to pay so you remain fair to the customer.

(“How to Price Menu Items in a Restaurant”,

www.foodservicewarehouse.com/education/restaurant-operations/price-menu-items.aspx)

4. Q: Evaluate the food costing information on the below seafood items.

a. Which item has the highest profit margin?

b. How could you maximize the profit on all three menu items?

Fish: Halibut

Food Cost: \$2.75

Selling Price: \$12.79

Food Cost Percentage: 21.5%

Gross Profit: \$10.04

Fish: King Crab Legs

Food Cost: \$7.50

Selling Price: \$20.79

Food Cost Percentage: 36.4%

Gross Profit: \$13.29

Fish: Salmon

Food Cost: \$6.42

Selling Price: \$18.99

Food Cost Percentage: 35.6%

Gross Profit: \$11.57

A: a. The crab legs. Even though the food cost is greater than the other items, this product had the highest gross profit margin.

b. Have your wait staff up sell your highest grossing item, in this case, the crab legs. Also, consider raising the selling price slightly on the salmon and halibut.

(“How to Price Menu Items in a Restaurant”,

www.foodservicewarehouse.com/education/restaurant-operations/price-menu-items.aspx)

5. Q. Aside from the cost of menu items (direct cost), what are other influencing factors that can affect a restaurant's profitability?

A. a. Indirect costs: aspects of the restaurant that add perceived value or quality.

b. Labor: technically an indirect cost. Menu items that require more than the effort of heating and plating, such as talent or artistry merit a higher menu price.

c. Overhead: decor, marketing efforts, plating presentation, electricity, rent.

(“How to Price Menu Items in a Restaurant”,

www.foodservicewarehouse.com/education/restaurant-operations/price-menu-items.aspx)

6. Q. The below items have been categorized according to their food cost percentage. Which item would you want to sell a lot of and why?



- A. The beverages because they have the lowest food cost and because they have the potential to be very profitable. Often, customers are willing to pay \$2-\$4 for gourmet coffee, yet the actual cost for these items could be mere pennies. (“Running a Restaurant-Recipe and Menu Costing”, Stuart Mullis, 2006, www.allexperts.com)