

“Success In Business Math” Handout

NAME: _____

Instructions: Answer the following questions, showing your work as needed.
Round percentages to .1 and dollar amounts to nearest .01

1. Calculate Cost percentages, round to nearest tenth (0.1) of a percent:

$$(P/B=R)$$

- Cost \$200.00; Sales \$500.00; Cost % _____
- Cost \$150.00; Sales \$500.00; Cost % _____
- Cost \$178.50; Sales \$700.00; Cost % _____

2. Calculate cost, given the following figures for cost percent and sales:

$$(R*B=P)$$

- Cost percent 28.0%; Sales \$500.00; Cost _____
- Cost percent 34.5%; Sales \$2,400.00; Cost _____
- Cost percent 24.8%; Sales \$225.00; Cost _____

3. Calculate sales, given the following figures for cost percent and cost:

$$(P/R=B)$$

- Cost percent 30.0%; Cost \$2.57; Sales _____
- Cost percent 25.0%; Cost \$1.32; Sales _____
- Cost percent 33.3%; Cost \$1,000.00; Sales _____

Determine the total cost of each meal.

4. A tip of \$2.00 was 15% of the cost of the meal. _____

5. A tip of \$8.00 was 20% of the cost of the meal. _____

6. A tip of \$5.00 was 20% of the cost of the meal. _____

7. A tip of \$12.00 was 15% of the cost of the meal. _____

8. 35% of \$2,345 is? _____
9. 19 is what percent of 100? _____
10. 43 is what percent of 222? _____
11. \$3.25 is 28% of? _____
12. Four college friends go out and spend \$60.00 on lunch. They all pitch in and leave a \$10.00 gratuity. What percent gratuity do they leave? _____
13. A guest check totals \$152.50. The food server adds a 6% Sales Tax. How much is the Sales Tax? _____
14. Labor costs normally represent 35% of the sales dollar. If a restaurant expects to pay \$4,200 in Labor Cost this week, what is the amount of sales needed to maintain a 35% labor cost? _____
15. A restaurant has projected sales for the week to be \$15,500. If the restaurant traditionally works at a 32% Labor Cost, how much labor cost dollar could be expected? _____
16. A recipe's food cost is \$2.57 to prepare. If the restaurant wants to maintain a 26% food cost %, what should the minimum selling price be? _____
17. A foodservice operation brings in \$75,000 in food sales in January and wants to increase its food sales by 8% next month. What is the dollar amount of food sales needed in February? _____

Cost Control Alphabetic MOP Sheet

STEP 1: Convert unit in H to same unit in J

STEP 2: Divide G by H = I $G / H = I$

STEP 3: $I * D = K$

STEP 4: Repeat until all recipe items converted.

STEP 5: L= Total of K

STEP 6: $M = L * \text{“Q” Factor}$

STEP 7: $N = L + M$

STEP 8: $O = N$ divided by Standard Yield (See top of Control Sheet)

STEP 9: $S = O + \text{Added Costs.}$

STEP 10: $T = \text{Desired cost \%}$

STEP 11: $U = S$ divided by Q $S / T = U$

STEP 12: $V = \text{Menu Price}$

STEP 13: $W = S$ divided by V $S / V = W$

						Name: Chef Roche's Class				
Restaurant Name: Miami Dade School Lunch Catering Account								Standard Portion: 1		Sandwich
Classification: Childs Meal								Standard Yield: 1		Sandwich
Recipe Name: PB & J Sandwich										
Recipe		As Purchased		Ingredient		Invoice		Recipe		Individual
Quantity	Unit	EY%	Quantity	Unit	Ingredient	Cost	Unit	Cost	Unit	Ingredient Cost
2.00	slice	100.0%	2.00	slice	Wheat Bread	\$2.99	24 slices		slice	
2.00	oz.	100.0%	2.00	oz.	Peanut Butter	\$3.59	40 oz. Jar		oz.	
1.00	oz.	100.0%	1.00	oz.	Jelly	\$2.59	20 oz. Jar		oz.	
Method of Preparation						Total Ingredient Cost:				
Spread correct amount of peanut butter and jelly on each slice of bread, press together and then slice in half.						Q Factor %:				
						Recipe Cost:				
						Portion Cost:				
NOTE: Wear gloves with ready to eat food products!						Cost:				
						Cost:				
						Cost:				
						Total Plate Cost:				
						Desired Cost %:				
						Preliminary Selling Price:				
						Actual Selling Price:				
						Actual Cost %:				
Garnish: Be certain to list garnish as individual ingredient so cost is covered.										

Recipe Name: Three Bean Salad						Portion Size: 6 oz.				
Menu Category: Side Order						Standard Yield: 30				
Recipe		EY %	As Purchased		Recipe Ingredient	Invoice		Recipe/Invoice Compatibility		Individual Ingredient Cost
Recipe Quantity	Recipe Unit of Measure		Quantity Needed to Buy	Recipe Unit of Measure		Invoice Purchase Cost	Invoice Purchase Unit	Cost per Recipe Unit of Measure	Recipe Unit of Measure	
A	B	C	D	E	F	G	H	I	J	K
3	lb.	88%		lb.	Beans, fresh yellow	\$ 0.80	lb.		lb.	
3	lb.	88%		lb.	Beans, fresh green	\$ 18.00	25 lb.		lb.	
2	lb.	100%		lb.	Beans, red kidney	\$ 2.05	#10 (6.4 lb.)		lb.	
1	lb.	80%		lb.	Peppers, red	\$ 2.25	lb.		lb.	
4	hds.	100%		hds.	Lettuce, green leaf	\$ 18.80	24 head		hds.	
2	qt.	100%		qt.	Olive oil	\$ 14.75	gallon		qt.	
1	qt.	100%		qt.	Vinegar, red wine	\$ 10.60	4 gallon		qt.	
4	oz.	100%		oz.	Sugar, granulated	\$ 20.20	50 lbs.		oz.	
1	bun.	100%		bun.	Basil	\$ 14.40	12 bunch		bun.	
1	bun.	100%		bun.	Oregano	\$ 1.00	bunch		bun.	
1/2	tsp.	100%		tsp.	Marjoram	\$ 2.20	12 oz.		tsp.	
3	clv.	100%		clv.	Garlic	\$ 1.75	lb.		clv.	
1	tsp.	100%		tsp.	Salt	\$ 0.42	26 oz.		tsp.	
1	tsp.	100%		tsp.	Pepper	\$ 3.59	lb.		tsp.	
									Total Ingredient Cost:	L
									Q Factor <u>4</u> %:	M
									Recipe Cost:	N
									Portion Cost:	O
									Additional Cost:	P
									Additional Cost:	P
									Total Plate Cost:	Q
									Desired Cost %:	R
									Preliminary Selling Price:	S
									Actual Selling Price:	T
									Actual Cost %:	U

Please round all As Purchased Quantities up to the next highest quarter unit

Recipe Name: Baked Salmon with Lemon Butter					Portion Size: 4 oz.					
Menu Category: Entrees					Standard Yield: 50					

Recipe		EY %	As Purchased		Recipe Ingredient	Invoice		Recipe/Invoice Compatibility		Individual Ingredient Cost
Recipe Quantity	Recipe Unit of Measure		Quantity Needed to Buy	Recipe Unit of Measure		Invoice Purchase Cost	Invoice Purchase Unit	Cost per Recipe Unit of Measure	Recipe Unit of Measure	
A	B	C	D	E	F	G	H	I	J	K
12.5	lbs.	75%			Salmon sides	\$ 17.40	2.5 lb.			
0.5	cup	100%			White wine	\$ 7.64	gal.			
0.25	cup	100%			Lemon juice	\$ 28.65	12/32 oz			
as needed					Clam juice	\$ 23.30	12/46 oz			
3	lbs.	67%			Clarified butter	\$ 72.30	30/1lb.			
3	lbs.	100%			Bread crumbs	\$ 34.75	12/24 oz			
2	oz.	53%			Fresh Parsley	\$ 5.15	6/3.5 oz			
to taste					Salt	\$ 4.95	25 lb.			
to taste					Pepper	\$ 4.95	lb.			

Total Ingredient Cost:										L	
Q Factor <u>3</u> %:										M	
Recipe Cost:										N	
Portion Cost:										O	
Rice Additional Cost:										\$ 0.32	P
Vegetable Additional Cost:										\$ 0.24	P
Total Plate Cost:										Q	
Desired Cost %:										30%	R
Preliminary Selling Price at 30%:										S	
Actual Selling Price:										T	
Actual Cost %:										U	