

THANKSGIVING DINNER MATH PROJECT

Imagine that you are going to plan a Thanksgiving dinner! You are in charge of planning the menu, making a shopping list, comparing two different food store's prices, adjusting a recipe to include a larger amount of people, and finally calculating the total cost per person.

You may **brainstorm** menu items by referencing store flyers to find out actual costs.

Requirements:

1. Plan your Thanksgiving menu. Make a list and decide how much of each item you will need to accommodate 15 dinner guests.
2. Prepare a shopping list. Use the flyers, internet grocery store sites, and your parents as reference. (you will need to compare (2) different food store's pricing)
3. Pick a favorite recipe and alter it to accommodate 15 dinner guests. (have a before & after)
4. Correctly calculate pricing including discount, sales tax and total cost per person
5. Present your findings in a creative way using technology

The project must be presented using a PREZI, google app, Imovie, or other type of technology. If you have any additional ideas, please see me for approval.

Be very creative. You should enhance with pictures.

Remember - this is a math project so I will be looking for all the ways you used math in your presentation. All calculations must be correct!

This project will include 4 components and a presentation (see rubric): The menu, (2) shopping lists which compares two different food store's pricing, (1) recipe that was altered to accommodate 15 dinner guests, and calculations that also include discount, sales tax and finding the total cost per person.

Have fun and happy "shopping"!



DUE: **Monday, November 23, 2015**



Planning a Traditional Thanksgiving Menu

The following items are typical Thanksgiving dishes. All serving sizes are estimated recommendations **per dinner guest**. **This list is meant to serve as a guide only.** You do not have to include all items in your menu, and you may include items not included in this menu. Your serving sizes may also be different.

- turkey: $\frac{3}{4}$ pound per person for a whole turkey weighing over 14 pounds
- stuffing: $\frac{1}{2}$ to $\frac{3}{4}$ cup
- mashed potatoes: one pound of raw potatoes for every 3 people
- vegetables: $\frac{1}{2}$ cup or 4 ounces for each vegetable
- gravy: $\frac{1}{4}$ cup per person
- cranberry jelly/relish: 1 pound for every 5 people
- pie: diameter = # servings (an 8-inch pie would serve 8 people)
- bread: 1 $\frac{1}{2}$ rolls per person
- garnish: 4 ounces (pickles, olives, celery, carrot sticks, etc.)
- salads : (includes vegetable, jello, fruit) $\frac{1}{2}$ cup per person
- rice or pasta sides : $\frac{2}{3}$ cup per person
- snacks: 1 cup (popcorn, almonds, chips, candy)



Thanksgiving Menu (15 Dinner Guests)

Appetizers: _____

(min 4 items) _____

Dinner: _____

(min 6 items) _____

Desert: _____

(min 4 items) _____

Sample

Recipe Name: Classic Macaroni & Cheese

Original Serving Size: Makes 6 side dish servings

Altered Serving Size: Makes 18 side dish servings

Ingredients	Original amount needed	Math Computation	Altered amount needed
CAMBELL's Condensed Cream of Celery Soup	1 can	$1 \text{ can} \times 3$	3 cans
Milk	$\frac{3}{4}$ cup	$\frac{3}{4} \times 3 = \frac{9}{4} = 2 \frac{1}{4}$	$2 \frac{1}{4}$ cups
Mustard	1 tsp	$1 \text{ tsp} \times 3$	3 tsp
Pepper	$\frac{1}{8}$ tsp	$\frac{1}{8} \times 3 = \frac{3}{8}$	$\frac{3}{8}$ tsp
Cooked elbow macaroni	3 cups	$3 \text{ cups} \times 3$	9 cups
Shredded Cheddar Cheese	$1 \frac{3}{4}$ cups	$\frac{7}{4} \text{ cups} \times 3 = \frac{21}{4}$	$5 \frac{1}{4}$ cups

Computation Worksheet

Calculate the amount needed x cost. Be CAREFUL of the amounts needed!

Item	Amount Needed <small>(How many items needed for 15 People?)</small>	Acme Cost	Giant Cost
Turkey	18 lbs	\$0.95 per pound	\$ 1.49 per pound
Potatoes	10 lbs	\$2.50 for 5 lbs	5lb bag = \$ 3.99
Stuffing	3 - 8oz canisters	12 oz canister \$2.15	12 oz canister = \$ 2. 19
String beans	2 - 16 oz bags	12 oz bag = \$ 1.45	12 oz bag = \$ 1.25
Cream of Mushroom soup	3 - 10 3/4 oz cans	10 3/4 can = \$ 1.49	10 3/4 can = \$ 1.29
French fried onions	2 - 6 oz cans	6oz can = \$ 3.29	6oz can = \$ 3.39
Corn	2 - 16 oz bags	12 oz bag = \$1.50	12 oz bag = \$ 1.79
Dinner rolls	2 - 12 packs	12 pack = \$ 3.55	12 pack = \$ 3.49
Cranberry sauce	2 - 14 oz cans	14 oz can = \$ 0.88	14 oz can = \$ 1.49

Pumpkin pie	2 large pies	1 large pie = \$ 6.69	1 large pie = \$ 5.69
Apple Pie	2 large pies	1 pie = \$ 3.99	1 large pie = \$ 6.29
Cool whip	2 containers (8oz)	8 oz = \$ 1.83	8 oz = \$ 1.75
Brownie Mix	2 boxes	1 box = \$1.35	1 box = \$1.59
Margarine	2 - 1 lb boxes	1 lb box = \$ 0.99	1 lb box = \$ 1.09
Water	1 case of 24	1 case of 35 is \$4.50	3 cases of 35 bottles /\$ 11
Soda	5 - 2 liter bottles	2 L bottle = \$1.50	3- 2 L bottles for \$ 5
Milk	2 gallons	\$ 3.61 per gal	\$ 3.61 per gal
		Total cost	Total cost

Grocery Store #1
total cost less 15% discount

Grocery Store #2
total cost less 15% discount

Grocery Store #1
total cost plus 6% sales tax

Grocery Store #2
total cost plus 6% sales tax

Grocery Store #1
final cost per person

Grocery Store #2
final cost per person

Name: _____

Compare Different Food Store's Pricing

_____ Food Store vs _____ Food Store

Shopping List total \$ _____ vs \$ _____

Less 15% Discount \$ _____ vs \$ _____

Plus 6% Sales Tax \$ _____ vs \$ _____

Total Cost \$ _____ vs \$ _____

Total Cost Per Person \$ _____ vs \$ _____

Which Store would you buy your items from? _____

How much did you save compared to the competitor's pricing?
(Show ALL math computation on additional sheet)

Project					
	Excellent level 4 4 pts	Good level 3 3 pts	Fair level 2 2 pts	Poor level 1 1 pts	
ORGANIZATION	<p>Excellent level 4 Material is well organized, neatly presented in a colorful and engaging manner. Viewer can easily follow the flow of information presented.</p>	<p>Good level 3 Material is presented in a neat manner, but lacks organization. Writing may not be legible or organized.</p>	<p>Fair level 2 Material requires the viewer to study the presentation to find all the pieces of the task. Lacks the necessary neatness.</p>	<p>Poor level 1 Material is disorganized, not neat and not legible. The viewer has a hard time trying to make out what the project is about.</p>	
REQUIREMENTS	<p>Excellent level 4 Clearly read and interpreted the requirements of the project. Has everything required on power point, PREZI or other form of technology.</p>	<p>Good level 3 Missing 1 of the requirements needed. For example; Some titles of each item may be missing.</p>	<p>Fair level 2 Missing 2 of the requirements needed.</p>	<p>Poor level 1 Missing 3 or more of the requirements needed.</p>	
MATH CONTENT	<p>Excellent level 4 Math Computations are complete and correct. Diagrams have labels, data is organized and neat. All work is shown.</p>	<p>Good level 3 Math computations have 1-2 mistakes. Most worksheets have labels, data is organized. Not all work is shown.</p>	<p>Fair level 2 Math computations have 3 - 4 mistakes Some worksheets have missing labels, data is not very organized. Not all work is shown.</p>	<p>Poor level 1 Math computations have more than 4 mistakes. worksheets are missing labels, data is poorly organized. No work is shown.</p>	
TIMELINESS	<p>Excellent level 4 Project is delivered on due date.</p>	<p>Good level 3 Project is delivered one day past due date.</p>	<p>Fair level 2 Project is delivered two days past due date.</p>	<p>Poor level 1 Project is delivered three or more days past due date.</p>	