

Night of Fun!

5th Grade Decimal Place Value Math Project

The attached project is a stand-alone learning opportunity to practice skills acquired in the classroom setting. The intent is to challenge student thinking; therefore, some components may be difficult for your child. Feel free to modify and adjust for your child's needs.

About the project: In this project, students will be using their knowledge of place value and adding and subtracting decimal numbers to find ways that add up to \$200. They will be given an imaginary \$200 dollars as a gift.

*Note: Students will need access to a computer to research costs of items, and activity.

Directions: You were just gifted \$200! In order to have this money you are required to research and plan out a couple different ways to spend this money. You could either plan a night on the town or a home party.

Part 1 – The Night of Fun: Your proposal for the parents requires you to follow a few guidelines. You must:

1. Use part of the money for you and THREE friends to eat dinner. (Your parents will eat on their own so you don't need to plan to feed them. To keep it a little more manageable, you and your friends will all eat the exact same thing for dinner and each of you will eat one entrée, one beverage and one dessert.)

Some ideas might include: Red Robin, Taco Bell, Olive Garden, Melrose Grill, etc. (assume for this portion also, that there is not tax. Whether or not you leave a tip for your waitstaff will be up to you. It is recommended etiquette that a customer leaves 15 to 20 cents per dollar of the meal cost.)

2. Research and plan an outing for you and THREE friends in (your parents will just be driving you around and not participating in the activities, but you MUST pay them back for the gas they use driving you and your friends around).

Some ideas might include: Family Fun Center, Round One, A trip to the Great Wheel or anything else on the Seattle waterfront, Virtual Sports, Bounce 360, etc. You may go to more than one location and do more than one thing, if your budget allows.

3. Check with your parent/guardian before going online. Be sure to research costs of all parts. (One option for finding distance is to find the address of your locations and use www.mapquest.com to determine the path your parents should drive and how far it is.)

4. Plan how many miles that your parents have to drive you around from place to place. Assume that your friends will meet you at your house and you will leave from there. Also assume that your family has a car. Here are some things to know about your car:

- The gas tank is full.
- The gas tank holds 20 gallons of fuel.
- The car gets 30 miles per gallon.
- Gas is currently priced at \$3.39 per gallon.

You must also track all your expenses on the tracking sheet. All costs must be accurate (meaning you may have to do some research!)

Your Meal:

Name	Entree	Beverage	Dessert	Total for meal
You				
Friend 1				
Friend 2				
Friend 3				
Total for Dinner				
Tip?				
Grand Total				

Your Activity:

Name	Cost of Activity or Activities (some places have more than one thing for guests to do - ie: laser tag and mini-golf)	
You		
Friend 1		
Friend 2		
Friend 3		

Your Travel:

Starting Location	Destination (name your location – for example: Red Robin)	How far? (round to nearest tenth of a mile)	How much gas would that take? (round to nearest tenth of a gallon)	How much would that cost for the gas?	Total cost for this part of the evening?
Home	Dinner				
Dinner	Fun Activity #1				
Fun Activity #1	Fun Activity #2 (if budget allows)				
Fun Activity	Home				
Total cost for travel					

Your Evening Expenses:

Item	Cost (from your expense charts)
Cost of Meal	
Cost of Activity	
Cost of Travel	
GRAND TOTAL FOR YOUR NIGHT OF FUN	

Part 2 – Can you handle it?

To prove you are competent and worthy of managing this much money, your parents have a few math questions for you.

1. Is the cost of filling up the gas tank one time more, less or equal to the cost of dinner? Show your work and write an inequality statement ($<$, $>$, $=$) to show your final answer.

2. Is the cost of your fun activity more or less than the cost of dinner? Show your work and write an inequality statement ($<$, $>$, $=$) to show your final answer.

3. Were you surprised by the cost of anything on your night of fun? Did you expect your night to cost more or less than it actually did? Explain.
