I love Goldfish…
The cheese kind.

So with the school year underway I am looking to get my favorite cheesy treat back in my school lunch…Goldfish. I know they are not the best thing for me, but I don't think they are worst either. I feel that they are a sensible and tasty snack. Good with any sandwich. While at the store I noticed three different Goldfish products. I have listed the product, prices and amount of goldfish in ounces in the table below:

Product	Price	Total Ounces
Bag of Goldfish	$2	About 6 oz
Box of nine mini-packs of Goldfish, each 1 oz	$5	9 oz
Big box of Goldfish	$7	30 oz

1. I am planning on consistently buying Goldfish for my school lunch and snacks around the house for a while. I don't want my parents to think that the Goldfish is too costly, so I need to get a good deal. I also don't know if I will be able to eat a big box of Goldfish before they go bad, so I am a little worried that I could be wasting by getting the big box. Create **ratio tables** for each Goldfish product to help me determine which product to buy.

In case you haven't heard of a ratio table here is an example. Say Jelly Belly's are $5 for 12 ounces. I can find the cost of various weights of Jelly Belly's by doing some multiplying and dividing:

cost	5	10	1	15	20	25	4.25	.425
ounces	12	24	2.4	36	48	60	10	1

Make ratio tables comparing cost and ounces for each of the three Goldfish products. In each ratio table find various cost/ounce relationships. Try to compare the three products based on the same amount of ounces or the same price.

cost								
ounces								

cost								
ounces								

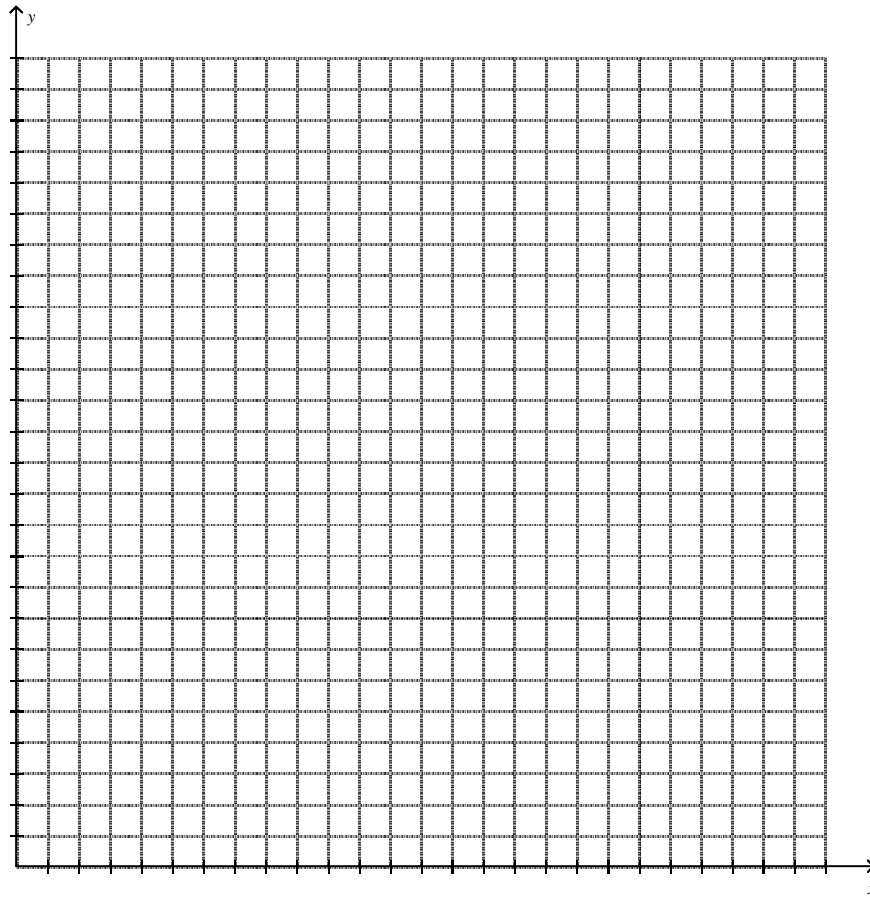| cost								
ounces								

2. Which product gives you the best deal on Goldfish? Use your findings in your ratio tables to show how you know.

3. My siblings also love Goldfish. Mom says that she thinks we go through about 700 to 800 ounces a year in Goldfish. Assume that this is a correct estimate and pick a number of ounces in that range that my family might go through. How much will we save per year on Goldfish by always buying the big box versus the other two products? Show your reasoning below.

4. Under what condition might it make sense to buy either of other two products that have a higher cost per ounce?

5. We can visually represent the cost per ounce of the three products on a graph. Graph all three cost-per ounce relationships on the grid below. Carefully select your scales.

y

x

6. How do the graphs help you compare costs? How does the steepness of the graphs more expensive product compare to the steepness of the less expensive products?

7. Sam's Club may sell a giant box of Goldfish at an ever cheaper cost per ounce then the big box of Goldfish. Determine a box size in ounces and a cost that has a lower price per ounce then the big box of Goldfish. Give the total ounces of Goldfish in the box, the cost of the box, the price per ounce of the box and finally describe how the cost per ounce graph of this product would look compared to the other three graphs.

8. What are some different methods for determining what product is the best deal? For example, what methods could you use to determine which is a better value, a 2-liter (2000 ml) bottle of Coke for $1.50 or a 355 ml of Coke for $0.70?