

## KRAVE Yogurt Problem-Solving Scenario

Directions: Read the scenario below. Use your problem-solving skills to determine the answer to each question. You may either write your answers on looseleaf neatly or use a word processor. Either way, you must show all steps of your calculations and clearly label your work.



A new yogurt shop has opened up in the neighborhood, KRAVE. It's a self-serve yogurt shop where every customer is able to grab a cup, fill it with his/her choice of yogurt and one or more toppings. The customer pays for the yogurt creation by the ounce. Currently, the price per ounce is \$0.33. Beverages and a limited number of other non-yogurt items are available. The chart below shows all the choices along with their current prices.

Item	Size (Cost)
Hot Drink (coffee, tea, hot cocoa)	8 oz. (\$1.29), 16 oz. (\$2.19), 24 oz (\$3.09)
Cold Drink (water, reg./diet soda, iced tea)	12 oz. (\$1.59), 20 oz. (\$2.39), 32 oz. (\$3.99)
Giant Cookie	\$1.99
Giant Pretzel	\$2.99
Donut Treats (chocolate, coconut, jelly roll)	Half-dozen (\$1.69), dozen (\$3.29)

1. You go to KRAVE one day after school and get a large cup of strawberry yogurt topped with fresh blueberries and toasted coconut. When you place it on the scale, you see that your yogurt creation weighs 10.4 ounces. You decide to buy a half-dozen chocolate donut treats to dip in the yogurt. To wash it all down, you decide on a 32 oz. diet cherry cola. In the city where Krave is located, this entire order is taxed at a rate of 9%. You have a ten dollar bill in your wallet. Will it cover the cost of your order?

2. The Smith Triplets enter KRAVE while you are there. They each order the same thing (they're identical after all!): A giant pretzel, a dozen jelly-roll donut treats, a 16 oz. hot cocoa, and a banana-split yogurt with chocolate sprinkles, crushed pineapple, strawberry sauce, and chopped walnuts which weighs 13.8 oz. They take advantage of a coupon for 25% off their entire order (pre-tax). KRAVE gift cards come in \$5, \$10, \$20, \$25, \$40, \$50, \$75, and \$100 denominations. Which is the smallest denomination that will cover the cost of the triplets' entire order, including the tax? How much will be left on the card if they use it for the first time to purchase this order?