



Decimals can be encountered in many areas of our daily lives. When we order food at a restaurant or go to the gas station, we see numbers written and expressed to the nearest hundredth. The grocery store is the same; we see prices for items, prices per unit, sale stickers, and so on, and we need to be able to find the best prices to get the most for our money.

For your upcoming trip to the grocery store, and suppose you have made a full list of items that you will need to purchase. In each question, you will be evaluating the prices of each item on your list using various operations with decimals.

1. The first three items you need to buy are a gallon of milk, 2 cartons of eggs, and a stick of butter. You have found that \$3.49 is the best price for milk, \$2.57 is the best price for one carton of eggs, and \$0.93 is the best price for a stick of butter. What is the total cost of these items?
2. For canned beans, the grocery store is running a promotional deal where you will receive 50 cents off each canned good as long as you buy 10 of them. If the price of one can of beans is \$1.34, what is the total price for 10 cans of beans? Explain how you found your answer.
3. When it comes to buying a loaf of bread, you have several options. To find the best deal, in this case, we need to find the unit price. The unit price is the cost per one item in a larger group. In other words, the unit price of the bread would be the cost per each slice of bread as opposed to the cost for the entire loaf. Assume each slice is the same size.

Bread Brand A has 25 slices and costs \$2.35.
Bread Brand B has 18 slices and costs \$1.95.

 - a. What is the unit price for a slice of Brand A's bread? Round to the nearest hundredth.
 - b. What is the unit price for a slice of Brand B's bread? Round to the nearest hundredth.
 - c. Which brand has the better deal per slice of bread? How do you know?
4. The store has three brands of paper towels for sale, with varying prices and amounts of individual sheets. Assume each sheet has the same dimensions.

Brand C is \$12.90 for 400 sheets.
Brand D is \$8.36 for 500 sheets.
Brand E is \$9.30 for 775 sheets.

 - a. Calculate the unit price for each brand per sheet. Round each to the nearest hundredth.
 - b. During the weekend, the grocery store is running a sale on paper towels. If Brand C is on sale for a discount of 20%, is it now cheaper than Brand E, by unit price? Explain your answer.
 - c. What total price would Brand D need to be to have the same unit price as Brand E? (Hint: Use the rounded value you found in part a.)
5. To finish your grocery trip, you have to make choices with your remaining money. What is one possible combination of items you could purchase assuming you have \$20.00 left to spend, you must purchase at least one of each item listed, and your total must be greater than \$18.00. Justify your answer by showing your total spent and explain why you chose the items you did.

One pound of bananas for \$0.64
A 5-lb bag of apples for \$5.63
A 3-lb bag of potatoes for \$3.68
A 2-lb bag of baby carrots for \$1.99
A container of guacamole for \$2.67