On the previous page, you found the sale price of certain items when they were sold at 50 percent off, but you didn't have to add sales tax. If the tax rate is 7.25 percent, how much will each item cost?

Raincoat _____

Mittens _____

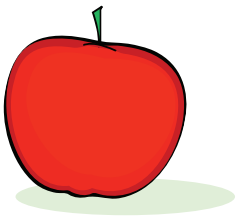
Ice Skates _____

Scarf _____

If you wanted to buy all these items together, how much would it cost?

_____

Hungry for Math



Use what you know about calculating percentages to solve the following word problems. Be sure to show your work and include the $ sign in your final answers. On this page, assume that the sales tax is already included in each price.

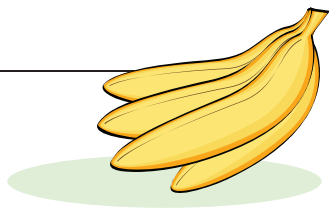
1. Max went to the local farmer's market to buy some fresh produce. He bought bananas for 30 percent off $3.00. He also bought a half dozen apples for 40 percent off $2.00. How much did he spend? _____

2. John went shopping for his mom's birthday. He purchased a pair of gloves for $5.00, a scarf for $4.00, and a knit hat for $7.00. When he got to the register, he used a 20 percent off coupon. How much did he spend? _____

3. Michelle went to the corner deli. She bought her sister a hot dog for $3.25, her brother a hamburger for $4.20, and a vegetable stir fry for herself for $5.50. She also bought three large sodas for $1.50 each, but the sodas were 50 percent off. How much did she spend?_____

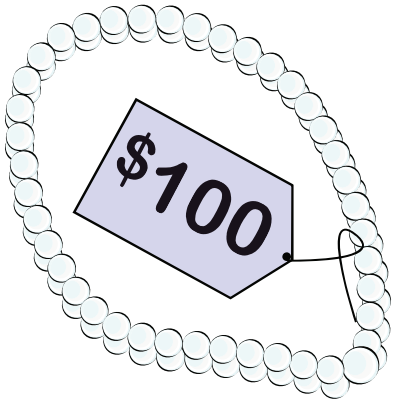
4. Shannon went to the bookstore. She bought a book for $7.99, a magazine for $4.25, and a bookmark for $1.99. She also received 15 percent off of her entire purchase. She handed the cashier a $20 bill. How much did she spend and how much change did she get back?

_____



Let's Go Shopping!

Each of these items is on sale, but the percentage off is different for each one. Find the sale price. On this page, ignore sales tax.



Pearl necklace:
$100
35% off!

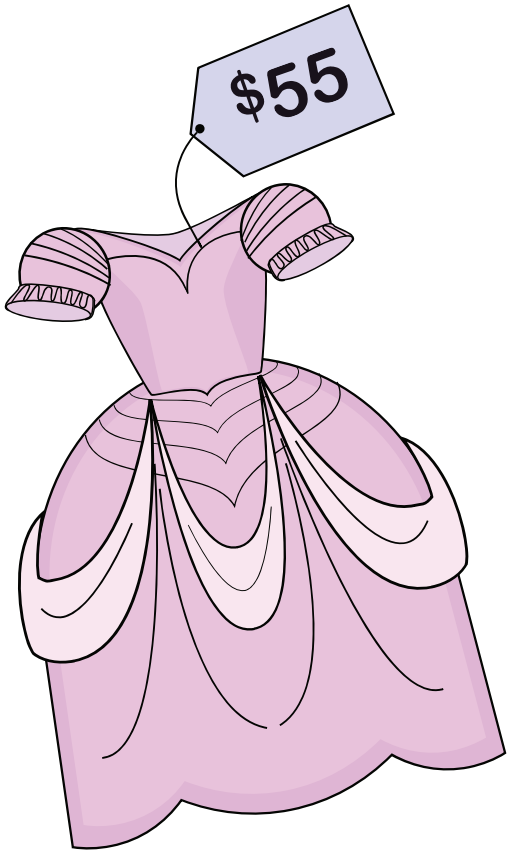
_____

Earrings:
$150
60% off!

_____

High heeled shoes:
$80
40% off!

_____



Dressy dress:
$55
10% off!

_____

Fancy purse:
$250
30% off!

_____

Tax-Free

In the United States most foods are not taxed. Therefore, when you calculate the cost of foods, you don't need to worry about adding any sales tax. Find the total price of each of the foods below by multiplying the price per item by the number of items.

1. 5 boxes of graham crackers at $3.49 per box: _____

2. 4 quarts of milk at $1.49 per quart: _____

3. 8 cans of soup at $3.11 per can: _____

4. 12 energy bars at $2.29 per bar: _____

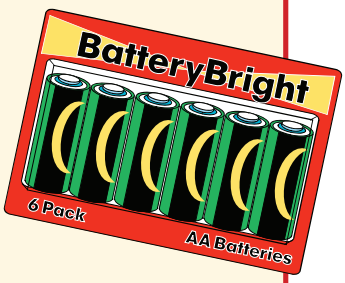
5. 3 dozen eggs at $3.79 per dozen: _____

More BANG for your buck

Smart shoppers always look for the lowest price for the items they want to purchase. Most supermarkets have many different brands that sell similar products. You might like a certain brand, or you might think that it doesn't matter which one you buy; they're all the same! So, how do you know which one to buy, especially when they all come in packages with different amounts? Which one is the best deal for your money?

You can save a lot of money when you are able to accurately compare the price per item. To find the price per item, or "per count," divide the total amount by the number of items in the package. This will ultimately help you find the best price when you shop. The price per count is also called the item's "unit cost."

Example:



Crystal is going on a camping trip this weekend. She needs to buy at least two AA batteries for her flashlight. ExtremeBattery batteries come in packages of 4 batteries that cost $4.99 each. BatteryBright sells its batteries in a pack of 6 for $5.79. Which is the better deal?

Step 1: Determine the cost of each ExtremeBattery battery by dividing the price by the total number of batteries per package. Remember to always round final answers up to the nearest cent!

$4.99 ÷ 4 = $1.25 per battery

Step 2: Determine the cost of each BatteryBright battery in the same way.

$5.79 ÷ 6 = $0.97 per battery

Step 3: Compare the price per battery. The BatteryBright battery has a lower price per battery.

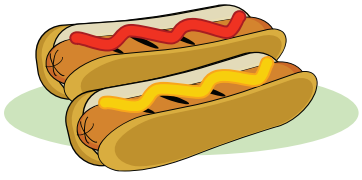
Sometimes, even when you have to pay more up front, you get a better deal. You, the consumer, have to decide if paying more at the time of purchase is worth it to you in the end. With a product like batteries that last a long time, it might be better for you to purchase more of them at a lower price than spending less in the moment of purchase.

Crystal wants to get the best price on the other items she needs for her camping trip. To help her make the best choices for her needs, determine the unit cost of each brand and decide which brand gives her the best value for her money. Round to the nearest cent.

One 96 oz. bag of Yummie marshmallows for $3.99 _____	One 72 oz. bag of Puffy marshmallows for $3.50 _____
A 6-pack of soda for $4.59 _____	A 12-pack of soda for $8.00 _____
A 4-pack of SpeedyLight boxes of matches for $2.99 _____	A 6-pack of MagicMatch boxes of matches for $5.00 _____
One dozen hot dogs for $4.49 _____	An 8-pack of hot dogs for $3.35 _____

If Crystal buys one of each of the four product types above, each at the best value for her money, what will be the total cost of all four items?

_____



Buying in Bulk

Another way that people save money is by "buying in bulk," or buying large quantities of the products they use the most. As seen on the previous page, you can often save money when you buy more of the same item.

Help the Maximizer family decide where to buy the items they most need for their family of eight. Find the cost of the same amount of products at each store. Compare the prices at each store when the Maximizers buy the product in bulk at LessCost Superstore vs. the price they would pay at a typical supermarket, SW Supermarket.

To decide which store has the better value, find the unit price for each of these items. Round up to the nearest cent.

LessCost SuperStore	SW Supermarket
 One 20-pack of soap at $5.99	Four 5-packs of soap at $1.09 each 
 Two 40-oz bottles of shampoo at $8.99 per bottle	Four 20-oz bottles of shampoo at $5.79 per bottle 
 One box of 500 sandwich bags for $11.85	Five boxes of 100 sandwich bags for $2.95 each 
 Three boxes of 20 fruit roll-ups for $6.99 per box	Four boxes of 15 fruit roll-ups at $3.25 each 

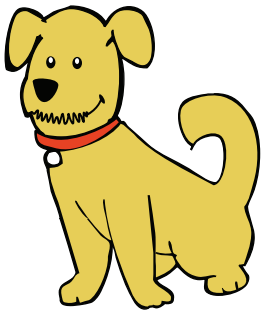
What do YOU think?

Do you think it's more important to pay the lowest price per item, or is it more important to get the brand you like? Explain your answer.

It All Adds Up!

Let's put all your consumer math skills to the test!

Each month, Susie stocks up on pet supplies for her dog, Barksalot. See if you can calculate Susie's monthly expenses for June, July, August, and September. Keep your work organized in the space below each problem.



1. In June, Susie buys a dozen cans of Dog's Dinner dog food at $1.89 per can. She also buys two bags of 'Dem Bones dental chews that each cost $12.69, and a new toy for $10.25. She pays sales tax at a rate of 7.25%. What is her total cost for the month of June?

2. In July, the weather is especially hot, so Susie buys a doggie sprinkler toy for $39.95. Barksalot also needs a new collar. The collar costs $8.00. She buys another dozen cans of Dog's Dinner dog food, as well as a new bottle of flea shampoo for $9.99. No prices have changed since June, and the sales tax remains the same. What is the total amount of her expenses in July?

3. In August, Barksalot needs a haircut. A trip for Barksalot to go to Perfect Pet's doggie day spa costs Susie $79.50. Susie also decides to treat her pooch to a big, tasty bone for $10.50. She buys another dozen cans of Dog's Dinner dog food, only this month, the cans are on sale for 20 percent off the regular price of $1.89 per can. Given that the sales tax rate has stayed the same, how much does Susie spend on pet expenses in August?

4. In September, it's time for Barksalot to get his annual checkup at the vet. Barksalot needs to get his teeth brushed for $50, a rabies booster vaccination for $49, and an anti-flea treatment for $18. Susie has a coupon that gives her a discount of 15 percent off the vaccination. There's no sales tax. What will be the total bill for Barksalot's visit to the vet?

Income and Expense

Income is money that people earn and add to their bank accounts, and expense is money they take out of their accounts to spend. Help County Bank's budget advisor, Mrs. Trusty, give financial advice to her customers by calculating their incomes and expenses below.

1. Mr. Peabody earns $1,500 each week and his wife earns $750. Each week, they need to set aside $200 for food, $75 for gas, $650 for the mortgage, and $350 for savings. How much money will they have left each week?

Total income: _____

Total expense: _____

Remaining amount: _____

2. Dylan is going to school and working two part-time jobs. During the month, he works 20 hours for $9.25 per hour at the grocery and 15 hours for $11.50 per hour at Stellar Pizza Parlor. For all his hard work his mom gives him a monthly allowance of $150. Dylan is responsible for his $35 cell phone bill, $50 gas bill, and $200 car payment. Can he still save $200 for college? If so, does he have $50 to spend while hanging out with friends?

Total income: _____

Total expense: _____

Can he still save $200 for college? _____

If so, does he have $50 to hang out with friends? _____