

1. A certain store advertises that all items have been marked down 12%. Sally wishes to buy a dress which was originally priced \$100, and notices a tag that says to take off an additional 13%. What is the total percentage markdown, and how much did Sally have to pay for the dress?
2. The Acme Wooden Nutmeg Co. has fallen on hard times, and the owner tells all of the employees that the company will close unless each employee takes a 40% cut in salary. Sometime later the company is back on its feet, and the owner thanks the employees and tells them that as a gesture of thanks he will not only increase their wages by 40%, which was the amount of the original reduction, but will add on an additional 20% to make the increase 60%. Do the employees have reason to be dissatisfied? What should the increase be to bring their wages up to their previous amount?
3. A customer purchases a bottle of brandy for \$45. The store owner remarks that the bottle is of unusual shape and that she would like to have empty for display in her store. She says that she would be willing to pay for the empty and tells the customer that the brandy costs \$40 more than the empty bottle. "O.K.", says the customer, "then you will have to pay me \$5 for the empty". "Your mathematics is all wet" says the store owner and she is right. What should she pay?
4. A customer in a grocery store gave the clerk some cash and also a check for \$22.41. The check bounced and the store's loss was 60% of the grocery bill. How much cash did the customer give the clerk?
5. The boundaries of a small country form a square of 50 miles on each side. A patrol plane travels around the boundary averaging 100 mph on the first side, 150 mph on the second, 300 mph on the third and 400 mph on the last side. What was the average speed over the entire trip?
6. A boy says, "I have as many brothers as sisters. His sister says, "I have twice as many brothers as sisters." How many brothers and sisters are there in the family?