1. What is 30% of $50?
2. The sweater shack is offering a 20% discount on sweaters. If the regular price of a sweater is $15 then what is the discount?

What is the sale price?

1. Your parents took your family out for dinner. They wanted to give the waiter a 15% tip. If the total for dinner was $42.00, what should the tip amount be?
2. Carlos invested $5400. Some money was invested at 7.5% and the rest at 6% per year. How much did he invest at each amount if his interest earned was $384?
3. Slatko invested some money at 8 3/4% interest per year, and half as much money at 9%. How much money did he invest at each rate if the total annual interest was $3047.50?
4. John wants to have an interest income of $3,000 a year. How much must he invest for one year at 8%?
5. An investment fund has $3000 more invested at 8% than it does at 10%. If the annual return from the 8% investment is the same as the annual return from the 10% investment, how much is invested at each rate?
6. Eddie invested $2400 in two simple interest accounts. The annual rate in one account is 8% and the annual rate in the other is 11%. How much did he invest in each account if the annual interest totaled $240?
7. Jeans Junction is selling jeans at 15% of the regular price. You need to but three pair of jeans for school. The regular price is $25.00 per pair. What is the discount?

Jeans Plus has a sign that reads "if you but three pair of jeans you save $10.00 off the total price". If the regular price for jeans is $25.00 per pair would you save more money shopping at Jeans Junction or at Jeans Plus?

Why? Justify your answer with mathematics or explanation of the above mathematics.

1. Jane owes the bank some money at 4% per year. After half a year, she paid $45 as interest. How much money does she owe the bank?

Reflection and Extension:

How do you feel about these types of problems? How does the strategy you use to solve these types of problems relate to chemical mixture or percent composition problems?

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CHALLENGE Problems:

Ron Burgandy has $15,000 to invest. He plans to diversify his money by investing it in two different accounts. One account gives 11.5% interest and the other 9% interest.

If he wants to make $1562.50 in interest in the first year, how much should he place in each account?

A woman had $10,000 to invest. She deposited her money into two accounts—one paying 6% interest and the other interest.

If at the end of the year the total interest earned was $682.50…

How much was originally deposited in each account?