

Solve each of the following. Remember to state any necessary assumptions that you need to make.

1. Kay Parsons invests a sum of money in municipal bonds paying 6% annual interest. She then decides to invest \$500 more than the sum originally invested in a real estate venture paying 10% annual interest. If her total annual interest from both investments is \$210, how much did she invest in each venture?
2. Steve saves \$18 each week from his salary. He already has accumulated \$324. In how many weeks will Steve accumulate \$468?
3. One evening, a movie theater sold 450 tickets to an early evening show, receiving \$2,625 in proceeds for the performance. If children's tickets were \$4.00 each and adult tickets were \$6.75 each, how many children's tickets and how many adult tickets were sold?
4. While shopping at *Lord & Taylor* during the Summer Sale, you find an item that has been marked down three times, the first two times by 25% and the third time by 30%. Since you have a 35% off coupon from the newspaper, you decide to buy the item. If you pay \$35 for this nontaxable item, what was the original price?
5. Marilyn deposits \$160 in her checking account. The number of \$5 bills that she deposited was 3 more than the number of \$10 bills that she deposited, and the number of \$1 bills that she deposited was 30 more than the number of \$5 bills that she deposited. How many bills of each type did Marilyn deposit?
6. Janine wins \$40,000 playing *Jeopardy*. After paying 30% of her winnings as income tax, she invests the remaining amount in two ways: part in bonds paying 9.25% annually, and the rest in mutual funds paying 7% annually. If she earns \$2,329 annual interest, how much did she invest in each way?
7. Phil had \$20,000, part of which he invested at 8% interest and the rest at 6%. If his total annual income from the two investments is \$1,460, how much did he invest at each rate?
8. Lynn made two investments totaling \$25,000. She made an 18% profit on one investment but she took an 11% loss on the other investment. If her net gain was \$2,180, how much did she invest at each rate?
9. Peter invested \$5,000 at 8% interest. How much additional money should he invest at 10% in order to earn the same amount of annual interest that he would if he invested both amounts at 9%?
10. Mariel invests her \$25,000 savings in two ways: part in bonds paying  $7\frac{1}{4}\%$  annually and the rest in mutual funds promising a 9% annual return. If her total annual income from these investments is \$2,040, how much did she invest in each way?
11. Kamran wins *The Big Game* Lottery. After spending \$150 on an ice cream party for his friends, he invests the rest of his winnings in treasury bonds promising a 5.25% annual return and in a Fleet Bank money market savings account promising a 3.7% annual yield: he invests \$3,000 more in treasury bonds than he deposits in his Fleet savings account. If the annual return on his investments is \$939, how much did Kamran win?
12. Monica wins \$17,250 in the lottery. After paying one-third of her winnings as taxes, she invests the money in three ways: bonds paying 12% annually, mutual funds with a 10% annual return, and stocks with an 8.25% return after one year. If she invests one-thousand dollars less in mutual funds than she did in bonds and if her annual return on these investments is \$1,206.25, how much did Monica invest in each way?