Simple Interest Word Problems

1. Vartan was paid $25,000 for a cell phone app that he wrote and wants to invest it to save for his son's education. He wants to put some of the money into a bond that pays 4% annual interest and the rest into stocks that pay 9% annual interest. If he wants to earn 7.4% annual interest on the total amount, how much money should he invest in each account?

2. Vern sold his 1964 Ford Mustang for $55,000 and wants to invest the money to earn him 5.8% interest per year. He will put some of the money into Fund A that earns 3% per year and the rest in Fund B that earns 10% per year. How much should he invest into each fund if he wants to earn 5.8% interest per year on the total amount?

3. Dominic pays 7% interest on his $15,000 college loan and 12% interest on his $11,000 car loan. What average interest rate does he pay on the total $26,000 he owes?

4. Liam borrowed a total of $35,000 to pay for college. He pays his parents 3% interest on the $8,000 he borrowed from them and pays the bank 6.8% on the rest. What average interest rate does he pay on the total $35,000?

5. Hattie had $3000 to invest and wants to earn 10.6% interest per year. She will put some of the money into an account that earns 12% per year and the rest into an account that earns 10% per year. How much money should she put into each account?

6. Carol invested $2560 into two accounts. One account paid 8% interest and the other paid 6% interest. She earned 7.25% interest on the total investment. How much money did she put in each account?

7. Arnold invested $64,000, some at 5.5% interest and the rest at 9%. How much did he invest at each rate if he received $4500 in interest in one year?

8. After four years in college, Josie owes $65,800 in student loans. The interest rate on the federal loans is 4.5% and the rate on the private bank loans is 2%. The total interest she owes for one year was $2878.50. What is the amount of each loan?

9. A trust fund worth $25,000 is invested in two different portfolios. This year, one portfolio is expected to earn 5.25% interest and the other is expected to earn 4%. Plans are for the total interest on the fund to be $1150 in one year. How much should be invested at each rate?

10. A business has two loans totaling $85,000. One loan has a rate of 6% and the other has a rate of 4.5%. This year, the business expects to pay $4,650 in interest on the two loans. How much is each loan?

11. Mark wants to invest $10,000 to pay for his daughter's wedding next year. He will invest some of the money in a short-term CD that pays 12% interest and the rest in a money market savings account that pays 5% interest. How much should he invest at each rate if he wants to earn $1095 in interest in one year?

Key

1. Invest $8000 toward the bond and $17000 toward the stocks.
2. Invest $33000 in Fund A and $22000 in Fund B.
3. The interest rate is approximately 9.12%.
4. The interest rate is approximately 5.93%.
5. Invest $2100 in the account earning 10% interest and $900 in the account earning 12% interest.
6. Invest $960 in the account earning 6% interest and $1600 in the account earning 8% interest.
7. Invest $36000 in the account earning 5.5% interest and $28000 in the account earning 9% interest.
8. The loan with 2% interest is for $5300, while the loan with 4.5% interest is for $60500.
9. Invest $12000 in the account earning 5.25% interest and $13000 in the account earning 4% interest.
10. The loan with 6% interest is for $55000, while the loan with 4.5% interest is for $30000.
11. Invest $8500 in the account earning 12% interest and $1500 in the account earning 5% interest.