1. How long would it take a bus traveling at 60 miles per hour to overtake a car traveling at 40 miles per hour if the car had 1.5 hour head start?

2. Two hikers are 11 miles apart and walking toward each other. They meet in 2 hours. Find the rate of each hiker if one hiker walks 1.1 mph faster than the other.
3. Karen invested some money at 9% annual simple interest and $250 more than that 10% annual simple interest. If her total yearly interest was $101, how much was invested at each rate?

4. A $50,000 retirement pension is to be invested into two accounts: part of it in a money market fund that pays 8.5% and the rest of it in a certificate of deposit that pays 10.5%. How much should be invested at each rate in order to provide a yearly interest income of $4550?

5. Solve for $T$: $RT = D$

6. Solve for $y$: $3x + 4y = -8$