Compound Interest Review #1 Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Hr\_\_\_\_\_\_\_\_\_\_

*Senior Math Applications*

  

**Use the following scenario to answer question #1-4:**

*Suppose you deposit money into a savings program that earns 9% interest compounded annually.*

1. If you deposit $1,750 every year for 20 years, how much money will you have after 20 years?

2. Suppose you leave the money in the account for another 15 years after you stop making deposits. How much money would you have?

3. How much longer would you have to keep the money in the account to have over $500,000?

4. Suppose you continued to deposit $1,750 for all 35 years. How much more money would you have made if you keep making deposits?

5. How much money would you make if you invest $12,000 in a bank for 40 years at an interest rate of 7.5% compounded quarterly?

6. How much money would you make if you invested $750 in a bank account for 37 years that compounds interest continuously at a rate of 11%?

7. How long would it take to double an investment of $2,000 at 5% interest compounded monthly?

8. You put your money in a bank account that compounds the interest daily. What interest rate would be needed to turn $300 into $1,466 in fourteen years?

9. You are saving to buy a new car that is worth $25,000. You currently have $5,000. How long would it take to save enough money to buy the car if you put your money into a bank account that earns 14% interest compounded weekly?