our Understanding

1. **SALARY** Ms. Acosta received a job as a teacher with a starting salary of $34,000. According to her contract, she will receive a 1.5% increase in her salary every year. How much will Ms. Acosta earn in 7 years?

2. **MONEY** Paul invested $400 into an account with a 5.5% interest rate compounded monthly. How much will Paul's investment be worth in 8 years?

3. **ENROLLMENT** In 2000, 2200 students attended Polaris High School. The enrollment has been declining 2% annually.
   a. Write an equation for the enrollment of Polaris High School t years after 2000.
   b. If this trend continues, how many students will be enrolled in 2015?

and Problem Solving

4. **MEMBERSHIPS** The Work-Out Gym sold 550 memberships in 2001. Since then the number of memberships sold has increased 3% annually.
   a. Write an equation for the number of memberships sold at Work-Out Gym t years after 2001.
   b. If this trend continues, predict how many memberships the gym will sell in 2020.

5. **COMPUTERS** The number of people who own computers has increased 23.2% annually since 1990. If half a million people owned a computer in 1990, predict how many people will own a computer in 2015.

6. **COINS** Camilo purchased a rare coin from a dealer for $300. The value of the coin increases 5% each year. Determine the value of the coin in 5 years.

7 **INVESTMENTS** Theo invested $6600 at an interest rate of 4.5% compounded