<u>DIRECTIONS</u>: Solve. Give monetary answers in dollars and cents ($###.##). All other answers should be rounded to two decimal places.

1. The value of a new $24,500 automobile decreases 20% per year. Find its value after…

   a. 1 year   **b.** 2 years   **c.** 5 years   **d.** 10 years
   $19,600.00   **$15,680.00**   **$8028.16**   **$2630.67**

2. The value of a new $7,500 sailboat decreases 10% per year. Find its value after…

   a. 1 year   **b.** 5 years   **c.** 10 years   **d.** 20 years
   $6750.00   **$4428.68**   **$2615.09**   **$911.82**

3. A gold coin appreciated in value from $100 to $238 in seven years. Find the annual rate of appreciation.   **13.19%**

4. Eight years ago, Miguel paid $250 for a rare stamp. Its current value is $1000. Find the annual rate of appreciation.   **18.92%**

5. A tractor cost $52,000 five years ago. Now it is worth $39,000. Find the annual rate of depreciation.   **5.60%**

6. A new car that cost $22,000 decreased in value to $10,000 in 6 years. Find the annual rate of depreciation.   **12.31%**

7. The value of a new $3,000 television decreases 25% per year. How long (in years) will it take for the value of the television to be $500?   **6.23 years**

8. The population of Super City increases 5% per year. The current population is 47,000 people. How long (in years) will it take for the population to reach 70,000? **8.16 years**