DIRECTIONS: 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

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

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

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

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

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

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?

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?