Math C

10.3 Modeling Exp. part 1

1. Suppose a $125,000 piece of heavy machinery is depreciating at 8% per year.

   a) How much is it worth after 5 years?

   b) How much is it worth after 7 years?

   c) How long will it take to be worth less than $50,000?

2. Suppose a Thunderbird depreciates at 25% a year.

   a) How long does it take for the car to be worth only half of its original price?

   b) How much of its original price is it worth after 4 years?

3. The bacteria population in a petri dish doubles every 2 hours. Initially, there are 45 bacteria in a petri dish. How many bacteria will there be 10 hours later?

4. The population in a particular town has been doubling every 20 years since 1900. In 1900, there were 25 residents. How many residents will there be in 2000?

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Answer List

1. $82,385, $69,731; 11 yrs
2. 2.4 yrs, 31.64%
3. 1440
4. 800

Catalog List

1. TRI KI 45
2. TRI KI 47
3. TRI KI 51
4. TRI KI 53