**Exponential FUNction Story Problems**

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| 1.) You buy a house for $230,000. Its value increases at a rate of 2% per year. Write an equation that models this situation and answer the following questions.  What is the value of the house after 5 years?What is the value of house after 10 years? | 2.) You invest $100 in an account at a 5% per year interest rate. Write an equation that models this situation and answer the following questions. What is the account value after 6 months? What is the value after 12 months?  |
| 3. Write an equation to model this situation and answer the question. A species of extremely rare narwhal are slowly becoming extinct. If there are a total 1000 of this type of narwhal and there are 10% fewer narwhal each month, how many will there be in half a year?  | 4. Write an equation to model this situation and answer the question. A bunny rabbit population is 50,000 and is decreasing in size at a rate of 20% per year. What is the bunny rabbit population after 3 years? |
| 5. Write an equation to model this situation and answer the question. A super-deadly strain of bacteria is causing the zombie population to triple every 4 days. The outbreak began with 3 zombies. How many zombies will there be after 32 days? After 60 days?  |