***Practice Quiz***

1. *Riya calculates how many whiskers the rabbits have by multiplying the number of rabbits by 6 (since each rabbit has 6 whiskers)*

a. Is this situation linear or exponential? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. Is the function discrete, continuous or discontinuous? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Write an explicit formula for the function:

1. *Avery has a money tree in her back yard. The first day they planted it, it had 4 leaves. Each day after the amount quadrupled.*

a. Is the change in the money each day linear or exponential? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. Is the function discrete, continuous or discontinuous? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Write an explicit formula for the function:

1. *There are two bank accounts you can choose from. The first bank account will increase your money by 2% each month. The second bank account will add 5 dollars to your bank account each month.*

*You get $1000 as a graduation present, so that is the money you are investing.*

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| These tables are projections based on the two different reports. |  | Create a graph showing data from both reports on the same grid. Make sure axes are clearly labeled and scale is indicated. |
| Bank 1 Bank 2:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Month | $ |  | Month | $ | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |

*After (approx.) how many months would both accounts be equal (after the initial month 0)?*

*When will the account for Bank 1 be growing faster than the money for Bank 2? (Explain your reasoning)*