

**Learning Target:** I can use a graphing calculator or reasoning to help analyze data and solve problems.

**Bell Work:**

4.

1 The population of mosquitoes in a swamp is estimated over the course of twenty weeks, as shown in the table.

Time (weeks)	Population
0	100
5	1,000
10	10,000
15	100,000
20	1,000,000

Which of the following best describes the relationship between time and the estimated population of mosquitoes during the twenty weeks?

- ☒ A Increasing linear  
☐ B Decreasing linear  
☐ C Exponential growth  
☐ D Exponential decay

The population of mosquitoes in a swamp is estimated over the course of twenty weeks, as shown in the table.

Time (Weeks)	Population
0	1,000,000
5	100,000
10	10,000
15	1,000
20	100

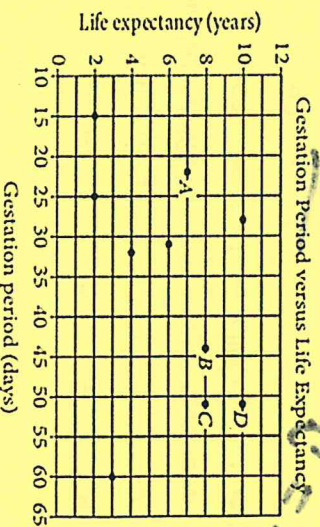
5. Describe this relationship mathematically.

Exp. Decay

**Learning Target:** I can interpret graphs to help analyze data and solve problems.

**Bell Work:**

7.



A curator at a wildlife society created the scatterplot above to examine the relationship between the gestation period and life expectancy of 10 species of animals.

6. What is the life expectancy, in years, of the animal that has the shortest gestation period?

- A.) 2  
 B.) 3  
 C.) 5  
 D.) 10

7. Of the labeled points, which represents the animal for which the ratio of life expectancy to gestation period is the smallest?

- A.) A  
 B.) B  
 C.) C  
 D.) D