**Algebra I – eDay Lesson #2** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_ Per \_\_\_\_\_\_

**Write and solve an exponential equation of the form *y* = *abx* for each problem below:**

1. A powerful computer is purchased for $2000, but on the average loses 20% of its value each year.  How much will it be worth 4 years from now?

2. The number of bacteria present in a colony is 180 at 12 noon and the bacteria grows at a rate of 22% per hour. How many will be present at 8 p.m.?

3. Inflation is at a rate of 7% per year. Today Janelle's favorite bread costs $3.79. What would it have cost ten years ago?

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| **Make a table of values and sketch the graph of each exponential function**. | |
| 4.  *y* = 4(0.5)*x* | 5.  *y* = 2(3)*x* |