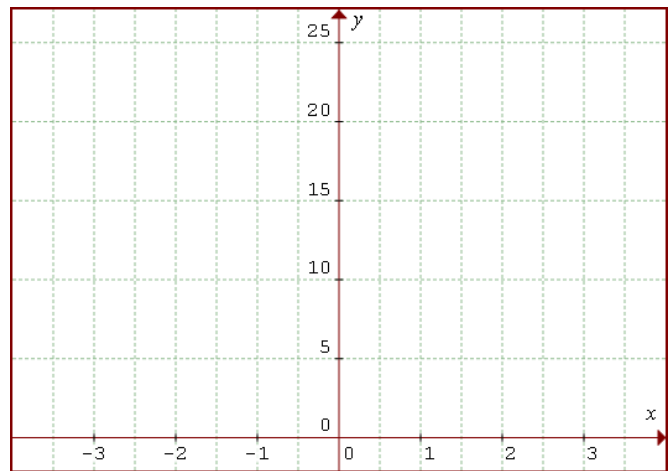## 7-6 Graphing Exponential Functions

Determine whether each rule represents exponential growth or decay. Explain how you know.
1. $y = 4 \cdot 3^x$

(2)

3. Graph the exponential function $y = 3 \cdot 2^x$

x	Work	y
-2		
-1		
0		
1		
2		
3		

(4)

4. A computer valued at $1900 loses 25% of its value each year.

a. Write a function rule that models the value of the computer.

(1)

b. Find the value of the computer after 3 years.

(1)

5. Suppose the population of a certain insect is modeled by the function $f(x) = 1600 \cdot 2^x$, where x is the number of years. How many insects will there be after 3 years? (Round to the nearest whole number)

(2)