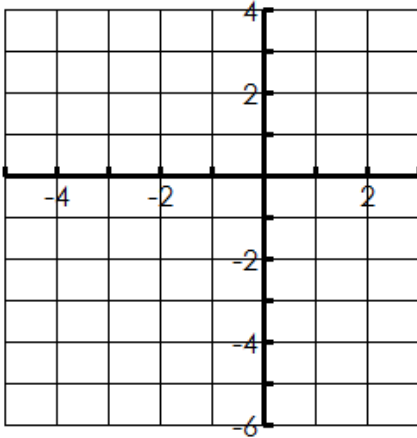Name: _____   Date: _____

Directions: A) Graph **each** exponential function below. B) Complete the information to the right based on the graph and/or the function.
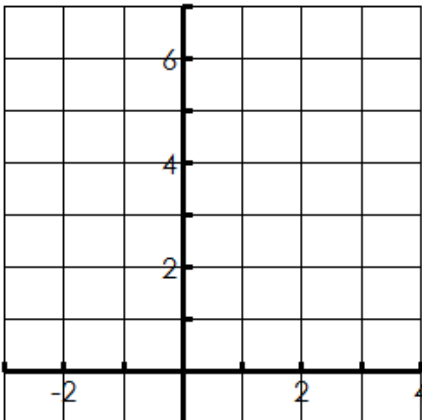
1. $y = -5^x$

State 3 points on Graph_____

Asymptote_____

Y-intercept _____

Is this an example of exponential growth or exponential decay? How do you know?
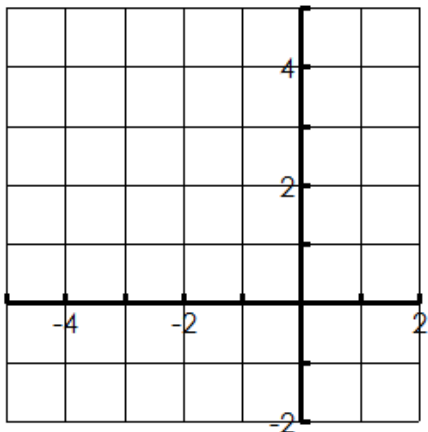
2. $y = \left(\frac{1}{2}\right)^x$

State 3 points on Graph_____

Asymptote_____

Y-intercept _____

Is this an example of exponential growth or exponential decay? How do you know?

3. $y = 2^{x+1}$

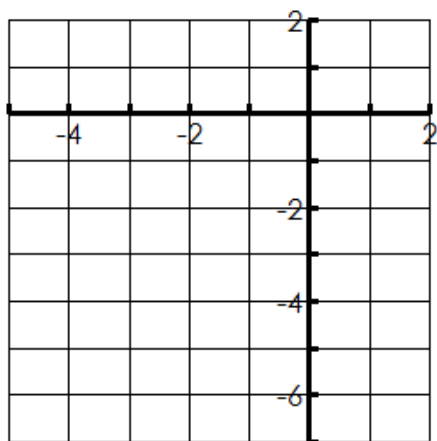State 3 points on Graph_____

Asymptote_____

Y-intercept _____

Is this an example of exponential growth or exponential decay? How do you know?

4. $y = -3^{x+1}$

State 3 points on Graph_____

Asymptote_____

Y-intercept _____

Is this an example of exponential growth or exponential decay? How do you know?