

Name \_\_\_\_\_

Due Date \_\_\_\_\_

Block \_\_\_\_\_

## Exponents and Logarithms #1

1. Use a calculator to plot the graph of the function:  $f(x) = -\frac{1}{2} \cdot 2^{-x}$

Evaluate:

2.  $4 \cdot 2^4$

3.  $4 \cdot (-2)^4$

4.  $4 \cdot (-2^4)$

Simplify the expression:

5.  $3(x^2y^3)^4$

6.  $(8x^2)^2$

7.  $4x^5 \cdot 8x^{-3}$

8.  $\left(\frac{25x^7y^3z^2}{5x^8y}\right)^2 \cdot x$

9.  $\frac{x^3}{y} \cdot \left(\frac{y}{x}\right)^5 \cdot \left(\frac{x^3}{y^2}\right)^{-4}$

10.  $-\left(-\left(-(-3)^2\right)^{\frac{1}{2}}\right)$