

Business PreCalculus MATH 1643 Section 004, Spring 2014
Worksheet 23

1- Which of the following are exponential functions:

a. $f(x) = -9(3^x)$.

b. $f(x) = 8x^4$.

c. $f(x) = 2^{-x}$.

2- Evaluate $f(x) = 4(2^x)$ at $x = 3$ and $x = -2$.

3- Graph the function $f(x) = 3^x$ and $g(x) = 3^{x-1} - 3$. Find the x -intercept for each function.

4- Find the exponential function of the form $f(x) = a^x$ that passes through $(2, 49)$.

5- Solve the exponential equations:

a. $4^x = 8^{-2}$.

b. $9^{4x-3} = 27^{3x-5}$.

c. $4^{x-1} = 1$.