

Module 4 Lesson 1 - Evaluating Exponential Functions Date _____ Period _____

© 2012 Kuta Software LLC. All rights reserved.

Evaluate each function. Show all your work!! Leave answers as fractions if they do not divide evenly.

1) $h(n) = 3^{2n}$; Find $h(0)$

2) $h(n) = 3^n$; Find $h(2)$

3) $g(x) = 2 \cdot 5^{x-2}$; Find $g(1)$

4) $g(x) = 2 \cdot 4^{-x} + 2$; Find $g(2)$

5) $f(n) = -2 \cdot 3^{3n} + 2$; Find $f(-1)$

6) $f(x) = 3^{x+1}$; Find $f(1)$

7) $k(x) = 3^x$; Find $k(0)$

8) $w(x) = 5^{x-1} - 1$; Find $w(-2)$

9) $g(n) = -3 \cdot 2^{n+2}$; Find $g(0)$

10) $f(n) = 4^n - 3$; Find $f(2)$

11) $g(x) = 2^{2x} + 2$; Find $g(2)$

12) $f(x) = 2^{-x}$; Find $f(0)$

13) $k(x) = 5^{x-1} + 3$; Find $k(-1)$

14) $k(t) = 5^{-t}$; Find $k(1)$

15) $w(x) = -4^x - 3$; Find $w(-2)$

16) $w(a) = 2^{a-1}$; Find $w(1)$

17) $k(x) = 2 \cdot 2^{x+3} + 1$; Find $k(0)$

18) $h(x) = 2^{x+2} - 3$; Find $h(1)$

19) $f(a) = 2^{a+3}$; Find $f(0)$

20) $g(n) = -2 \cdot 5^{3n+1} + 3$; Find $g(0)$

21) $f(x) = 2^x + 1$ and $g(x) = 3^x - 2$. Find $f(g(2))$.

22) $f(x) = 3^x - 24$ and $g(x) = 2^x + 3$. Find $f(g(3))$.

23) $f(x) = 2^x - 8$ and $g(x) = 2^x + 10$. Find $f(g(3))$.

24) $f(x) = 3^x - 7$ and $g(x) = 2^x + 10$. Find $f(g(2))$.