Quiz 4

Show *all* your work. No credit is given without reasonable supporting work. There are two sides to this quiz.

- 1. Let g(x) be the function graphed to the right.
 - (a) [1] Find the range of g.
 - (b) [3] (Exp Wks #3) Given that g(x) is an exponential function of the form $y = b^x$ that has been horizontally shifted and graphed to the right. Find the equation.



2. [2] (§3.2 #48) Find x given $\log_8 \sqrt[3]{2-x} = \frac{1}{3}$

- 3. Consider \$1,400 invested in an account with continuous compounding and a promised annual rate of return of .03%.
 - (a) [2] (Log Wks #1) Find a function that returns the total money in the account after t years.

(b) [2] (WebHW19 #15) How long does it take for the money to reach \$3,000?