## 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 $\$ 3,000$ ?
