## Quiz 1

Show all your work. Reasonable supporting work must be shown for any partial credit. There are two sides to this quiz.

1. Let $f$ be the graph below and to the right.
(a) $[1](\S 1.3 \# 60)$ Find $f(90)$
(b) [1] (WebHW2 \#19)

(c) $[1](\S 1.1 \# 50)$

Find an $x$-intercept.
2. [2] (GraphWks \#4) Plot (at least) two points that are on the graph of

$$
g(x)= \begin{cases}-2 x & \text { if } x<1 \\ -2 & \text { if } 1 \leq x\end{cases}
$$


3. [2] (§A.3 \#58) Perform the indicated operations to simplify $\frac{3-\frac{x}{2}}{x+1}-\frac{1}{2(x+1)}$
4. [3] (FractionWks\#2 \& Quiz1 from last TMath 115 class) You have 12 oz of mocha that is $25 \%$ espresso sitting in a 16 oz cup. Write a rational expression in $x$ whose values give the percentage (in decimal form) of espresso in the cup when $x$ oz of espresso are added to it.

