Quiz 1

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

1. [2] (WebHW1 #5) Let $f(x) = x^2 = x$. Find $f(x + 8)$.

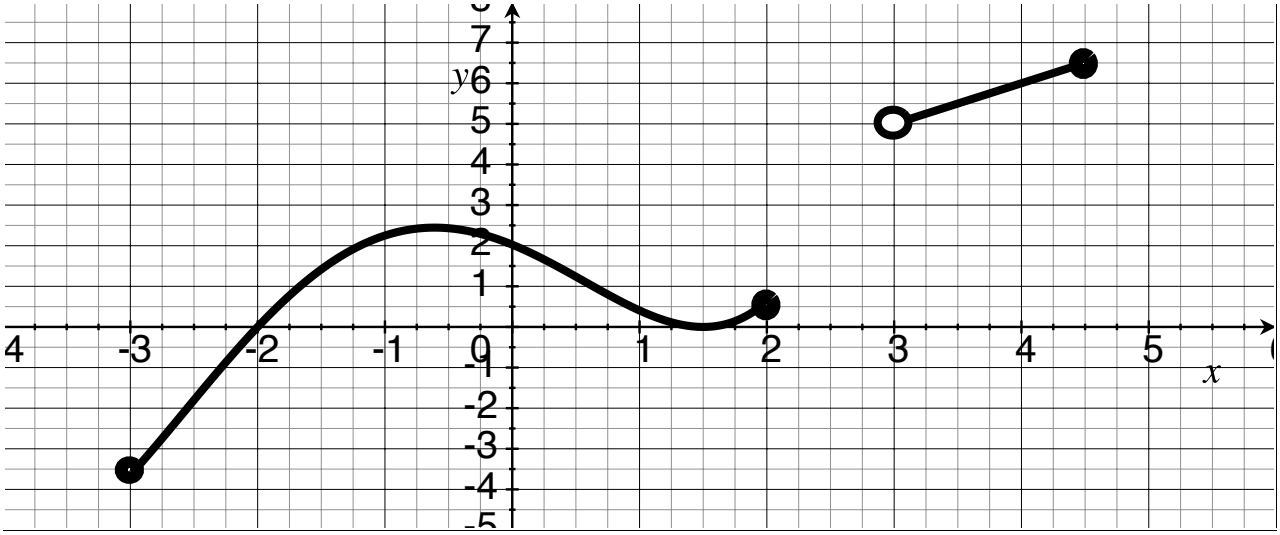
2. Let $G(x) = \begin{cases} 4.0 & \text{if } 90 < x \\ .1x - 5 & \text{if } 57 \leq x \leq 90 \\ 0 & \text{if } x < 57 \end{cases}$

   (a) [1] (Functions Wks #1) Find $G(73)$.

   (b) [1] (§1.1 #30) Is the point $(95, 4)$ on the graph of G? Why or why not?

   (c) [1] What is the domain of G.

3. Let g be the piecewise defined graph shown below.



(a) [1] (§1.3 #56) Find $g(4)$

(b) [2] *Estimate* x such that $g(x) = 2$.

(c) [1] (WebHW1 #16) Identify the x intercept(s).

(d) [1] (§1.3 #14) What is the range of g?