Quiz 1

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

1. Let $f(x) = x\sqrt{9-x}$.

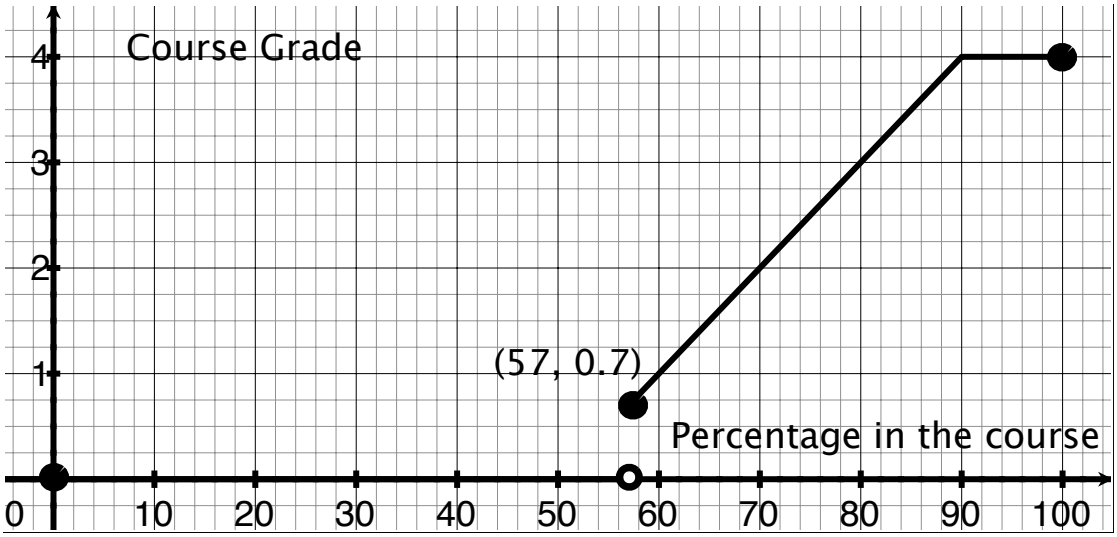
   (a) [1] (WebHW1 #5) Find $f(3+h)$.

   (b) [1] (§1.1 #30) Is the point $(-1, -\sqrt{10})$ on the graph of f? Why or why not?

   (c) [2] (WebHW1 #9) (Use the domain convention to) Find the domain of f.

   (d) [2] (§1.1 #48) Identify the x intercept(s).

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



(a) [1] (§1.3 #56) Estimate $g(80)$

(b) [1] (6/23 lecturer)*Estimate* x such that $g(x) = 2.5$.

(c) [2] (6/23 lecturer) What is the range of g?