

# Quiz 1

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

1. [3] (WebHW1 #13) Let  $f(x) = \frac{5}{x}$ . Find  $f(x+h) - f(h)$  and simplify.

2. Define  $G$  that takes numbers to the letter that it starts with when written in english. For example,  $G(2) = t$  since two begins with the letter t.

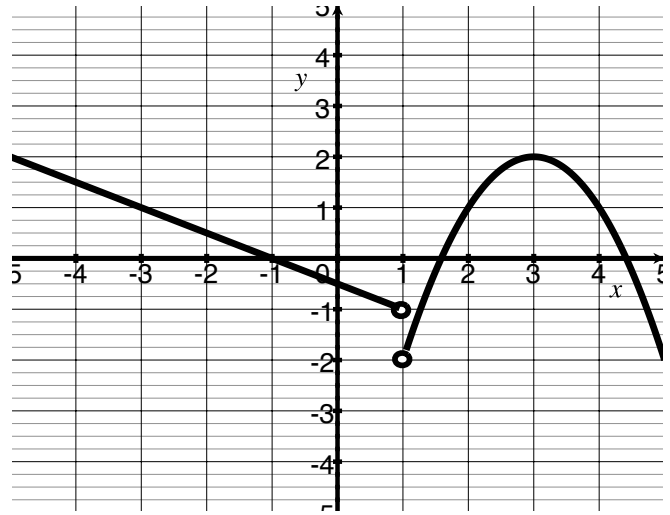
(a) [1] (§1.1 #30) Is the point  $(6, s)$  on the graph of  $G$ ? Why or why not?

(b) [1] (Graph Wks #4) Is  $G$  a function? Why or why not.

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

(a) [1] (§1.3 #56) Find  $g(3)$

(b) [2] (Graph Wks #4)  
*Estimate  $x$  such that  $g(x) = 1$ .*



(c) [1] (WebHW2 #7) Identify or estimate the  $x$  intercept(s).

(d) [1] (Graph Wks #4) What is the range of  $g$ ?