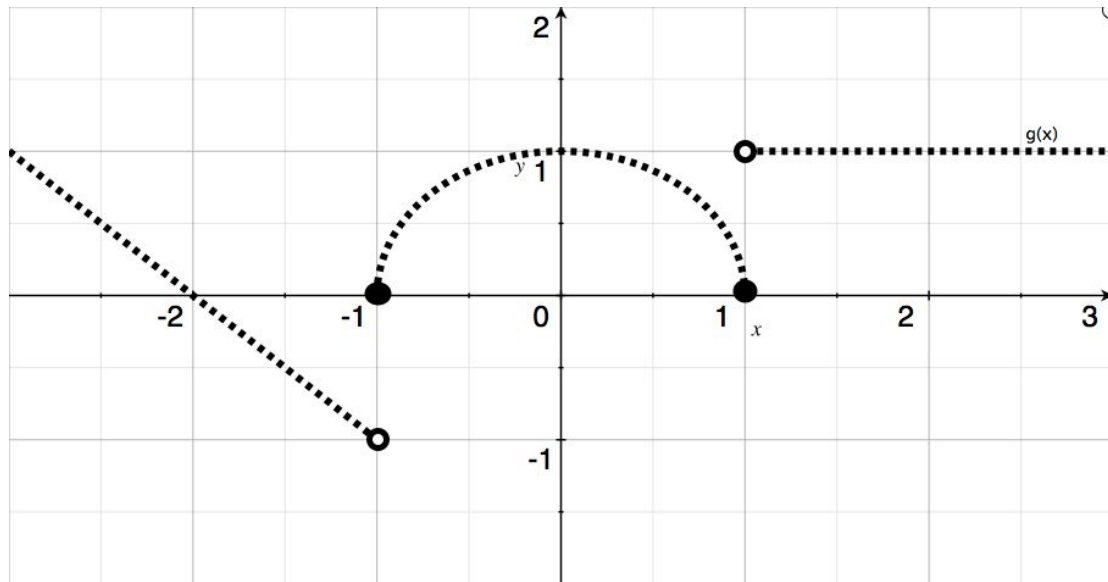


# Quiz 2

Show *all* your work algebraically for each and simplify. No credit is given without supporting work. There are *two* sides to this quiz.

1. Let the following be the graph of  $g$ .



(a) [2] Is  $g$  a function? Why or why not?

(b) [1] What is  $g(2)$ ?

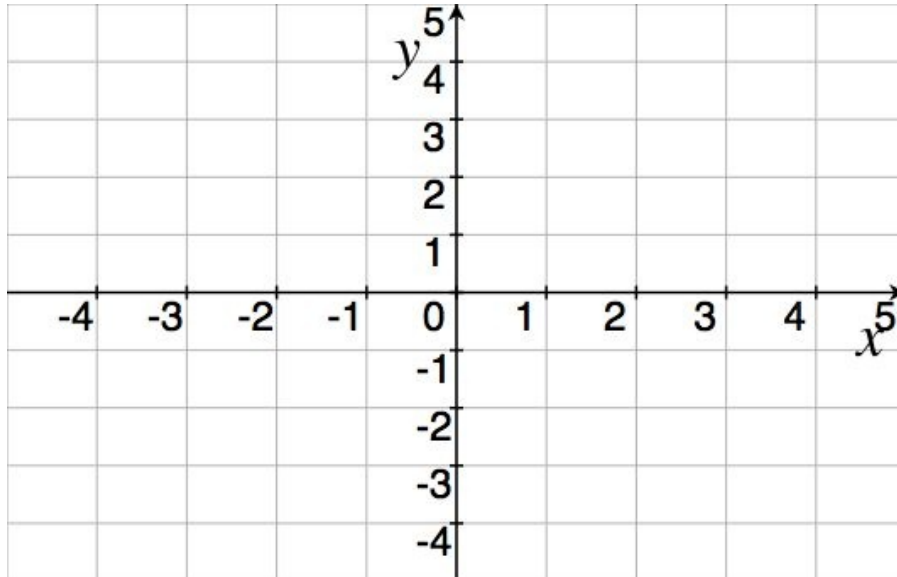
(c) [2] What is the range of  $g$ ?

(d) [1] If  $m(x) = g(x) + 1$ , graph  $m$ .

2. Given that the *function*  $f$  is defined by:

$$f(x) = \begin{cases} x & 0 \leq x \\ -x & x \leq 0 \end{cases}$$

(a) [2] Graph  $f$  on the axes below.



(b) [2] Let  $h(x) = x + 2$ . Find  $(h \circ f)(-3)$ .