

Math 105 Quiz 1

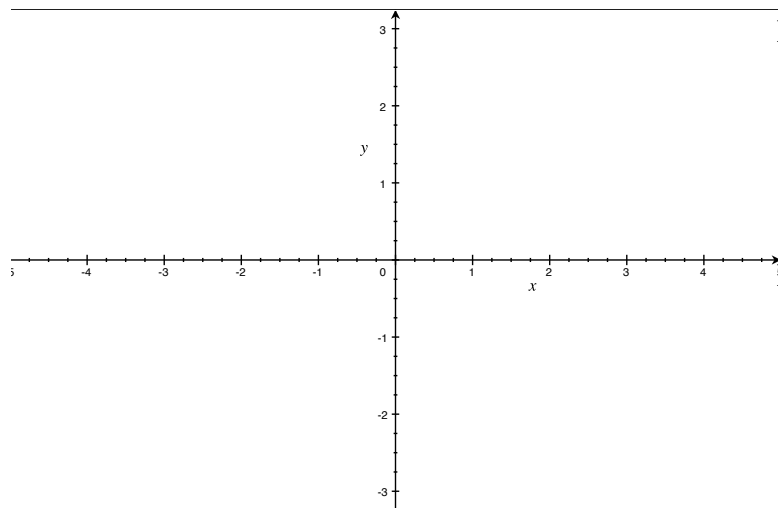
§1.1-§1.3

Name:

Show all work for credit. No calculators are allowed on this quiz.

1. Sketch the following functions on the same graph. Label them.

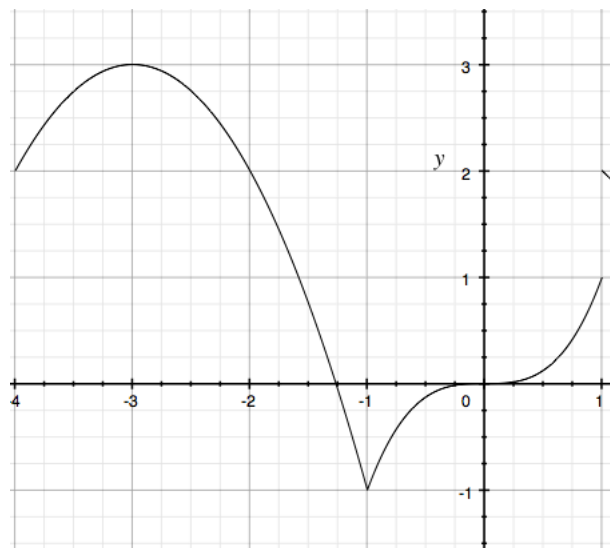
$$g(x) = (\sqrt{x}) + 1 \text{ and } h(x) = |x - 2| - 2$$



Find the domain and range of  $g(x) = (\sqrt{x}) + 1$ .

Find the domain and range of  $h(x) = |x - 2| - 2$ .

2. Consider the following graph from  $[-4,1]$ . Recall, “Where” is asking for  $x$ -intervals.



(a) Where is the function increasing?

(b) Where is the function decreasing?

(c) Where is the function concave down?

(d) Where does the function have negative output values?

3. Is the function from number 2. even, odd, or periodic on the interval from  $[-1, 1]$ ?