

## Math 1302, Summer 2016

### Quiz 3

Name: \_\_\_\_\_

**Problem 1.** Container Corporation of America wants to manufacture a box with no top from a 10 inch by 12 inch piece of metal by cutting equal-sized squares from each corner and bending up the sides. Express the volume of the container as a function of its height.

**Problem 2.** Which point on the graph of the function  $f(x) = \sqrt{x}$  is closest to the point  $(1, 0)$ ? **Explain your answer.**