Math 1150 - Autumn 2017   Name: _____
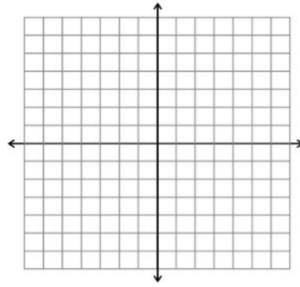
Quiz 4; Form A - In Class (10 pts)   Recitation Time: _____

SHOW ALL WORK!!! Unsupported answers might not receive full credit. Furthermore, please give me EXACT answers. You have 10 minutes to complete this quiz.

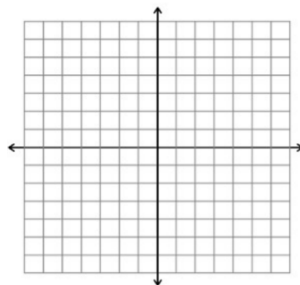**Problem 1**   [5 pts] Consider the function $f(x) = x^2 - 4$, $x \geq 0$.
(a). Graph $y = f(x)$, $x \geq 0$.

(b). Using the graph, write the domain and range of f in interval notation.

(c). Write an equation for $y = f^{-1}(x)$.

(d). Graph $y = f(x)$ and $y = f^{-1}(x)$ on the same coordinate system, given directly below. Clearly identify each of them (e.g. with an arrow and "$y =$" next to it).

Problem 2   [5 pts] Suppose that $10,000 is invested at 3% interest for 6 years.
(a). [3 pts] Find the value of the investment after the 5 year period if interest is compounded quarterly.

(b). [2 pts] Find the value of the investment after the 5 year period if interest is compounded continuously.