San José State University
Fall 2015
Math-8: College Algebra
Section 03: MW noon–1:15pm
Section 05: MW 4:30–5:45pm

Quiz #13 (Take-home)

When a function $f(x)$ has an inverse, we denote the inverse function as $f^{-1}(x)$. Note that this should note be confused with $\frac{1}{f(x)}$, which we would denote by $[f(x)]^{-1}$.

Consider the function $f(x) = x^2 - 4x + 3$.

1. Put $f(x)$ in standard form and sketch the graph.

2. What is the domain of $f(x)$?

3. By looking at the graph, does $f(x)$ have an inverse? Why or why not?

4. How can the domain of $f(x)$ be adjusted such that it does have an inverse?

5. Using the adjustment you found in (4), find $f^{-1}(x)$.