

Quiz #1 - Solution

#1. a) The range is $[-1, 3]$, or $-1 \leq y \leq 3$.

b) The minimum value is $y = -1$

but this occurs at $x = 1$.

$$\#2. f(x) = x/|x| = x \begin{cases} x & \text{if } x \geq 0 \\ -x & \text{if } x < 0 \end{cases}$$

$$= \begin{cases} x^2 & \text{if } x \geq 0 \\ -x^2 & \text{if } x < 0 \end{cases}$$
