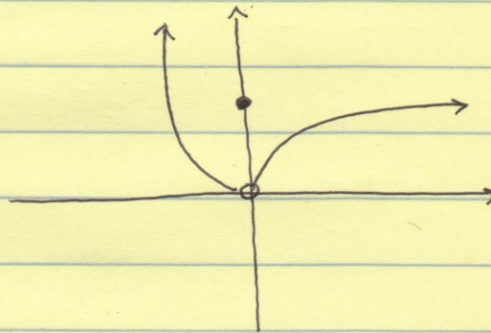


HW #7 Solutions

3.1.14 $f(x) = \begin{cases} x^2 & \text{if } x < 0 \\ 2 & \text{if } x = 0 \\ \sqrt{x} & \text{if } x > 0 \end{cases}$

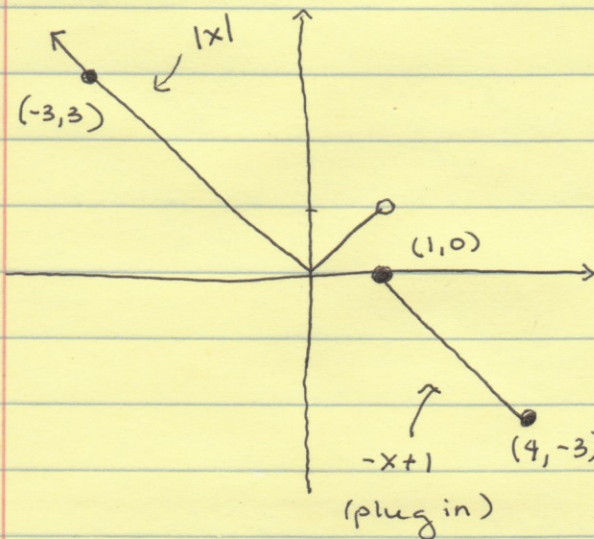
$f(0) = 0$ $f(-2) = 4$

$f(2) = \sqrt{2}$



$D = (-\infty, \infty)$ $R = (0, \infty)$

3.1.18



Rule:

$$f(x) = \begin{cases} |x| & \text{if } x < 1 \\ -x+1 & \text{if } 1 \leq x \leq 4 \end{cases}$$

for the line, we know it has to be $-x$ since it goes in the direction

We then add a constant 1 to make it match w/ the points

