Math 3
Unit 1 Day 7 HW

Name:
Date: $\qquad$

1) Graph the inverse of the function shown below and find the inverse points.

2) Find the algebraic inverse for each of the following:
a) $f(x)=15 x-1$
b) $y=\sqrt{x-3}+2$
C) $f(x)=(x-2)^{2}$
d) $f(x)=\sqrt{x-4}$
e) $f(x)=\frac{7 x+5}{4}$
3) Sketch the graphs of the following functions. Apply the Horizontal Line Test to determine if the function has an inverse function. Determine the inverse and graph it.
A. $\quad f(x)=\frac{1}{2} x-5$
B. $\quad f(x)=4 x^{2}-1$


Horizontal Line Test:
Is the inverse of $f(x)$ a function? $\qquad$


Horizontal Line Test:
Is the inverse of $f(x)$ a function? $\qquad$
$f^{-1}(x)=$ $\qquad$ $f^{-1}(x)=$ $\qquad$

