Day 02 Introduction to Graphing Inverse Functions
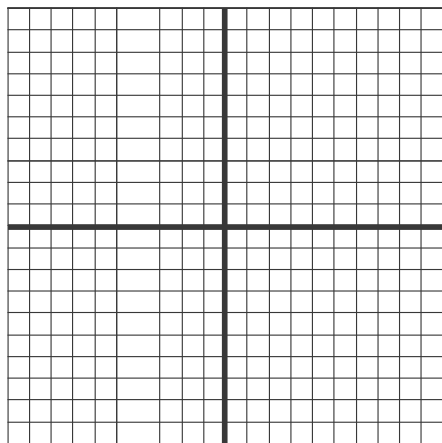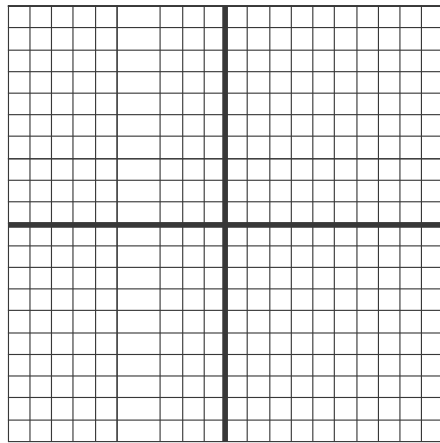
Name_____
Date _____Block___

1-6: Do parts A-D for each function.

A. Graph the function in pencil without a calculator. Show distinct points for each graph.
B. Graph the inverse of the function with a colored pencil. Do this by taking each coordinate (x, y) and plot new coordinates created by switching x and y (y, x).
C. Is the inverse a function? State Yes or No.
D. Write the equation of the inverse of each function. First, rewrite the equation by switching x and y. Then solve your new equation for y.
- If the inverse is a function, write the equation in function notation: $f^{-1}(x)$ = _____.
- If the inverse is not a function, write the equation in inverse notation: y^{-1} = _____.

1. $f(x) = -\frac{1}{3}(x+1)^2 + 7$

2. $f(x) = -\frac{2}{3}x + 2$

3. $f(x) = 2|x - 3| - 5$