

6-2 Day 1 Skills Practice
Inverse Functions and Relations

Find the inverse of each relation AND state whether the inverse is a function.

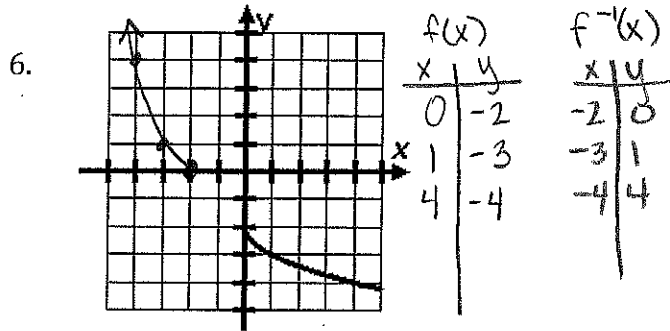
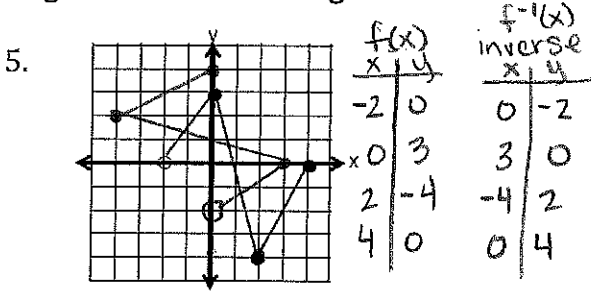
1. $\{(3, 1), (4, -3), (8, -3)\}$
 Inverse: $\{(1, 3), (-3, 4), (-3, 8)\}$
 not a function

2. $\{(-7, 1), (0, 5), (5, -1)\}$
 Inverse: $\{(1, -7), (5, 0), (-1, 5)\}$
 yes a function

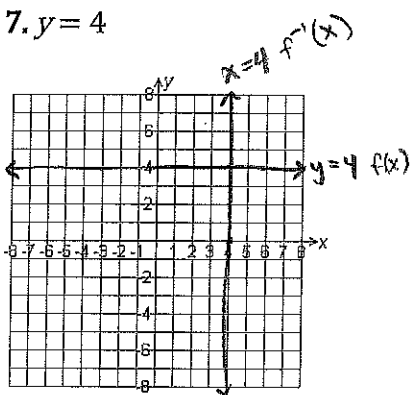
3. $\{(-4, 12), (0, 7), (9, -1), (10, -5)\}$
 Inverse: $\{(12, -4), (7, 0), (-1, 9), (-5, 10)\}$
 yes a function

4. $\{(-4, 1), (-4, 3), (0, -8), (8, -9)\}$
 Inverse: $\{(1, -4), (3, -4), (-8, 0), (-9, 8)\}$
 yes a function

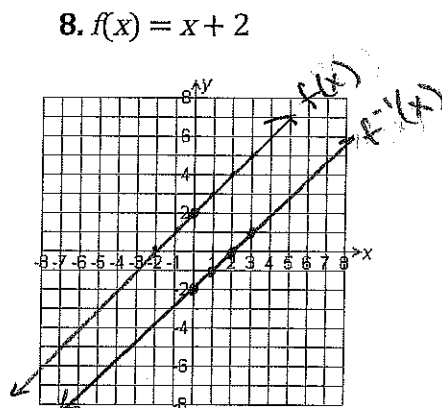
For each of the following, graph the inverse of the function on the same graph by making a table of the original and then making an inverse table.



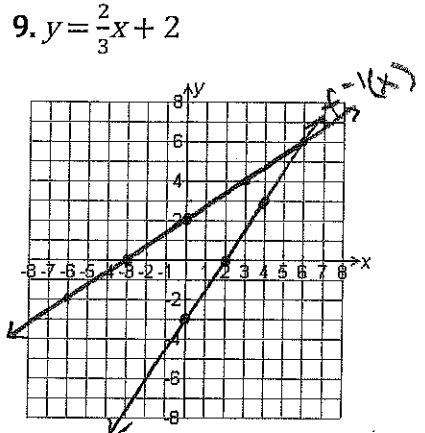
Find the inverse of each function. Then graph the function and its inverse.



* the inverse of a constant line is the line \perp .



① $y = x + 2$
 ② $x = y + 2$
 ③ $x - 2 = y$
 slope $m = 1$ y int $(0, -2)$



① $y = \frac{2}{3}x + 2$
 ② $x = \frac{2}{3}y + 2$
 ③ $x - 2 = \frac{2}{3}y$
 $\frac{3}{2}(x - 2) = (\frac{2}{3}y) \cdot \frac{3}{2}$
 $\frac{3}{2}x - 3 = y$
 slope y int