

# HOMWORK: INVERSES

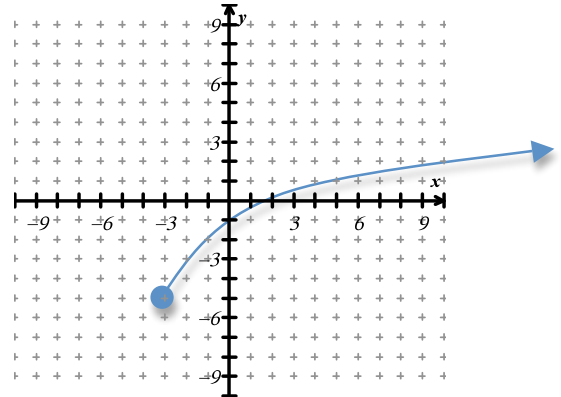
NAME: \_\_\_\_\_

Day 5 Due: \_\_\_\_\_

**Spiral review for everyone...**

1. Find the domain: \_\_\_\_\_

2. Find the range: \_\_\_\_\_



3. Find the domain of  $f(x) = \frac{3}{x-5}$

4. Find the domain of  $f(x) = \sqrt{2x+3}$

**CHOOSE 3** of the following to complete. Find the inverse!

5.  $y = -12x + 7$

6.  $y = 4x^2$

7.  $f(x) = x^7$

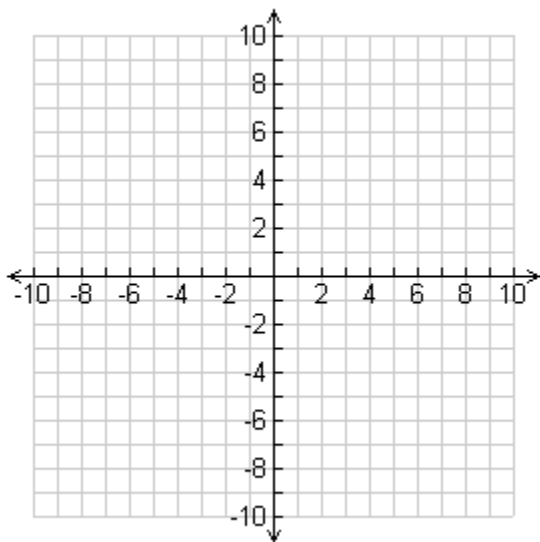
8.  $f(x) = \frac{5x-3}{2}$

9.  $y = \frac{-2}{3}x + 5$

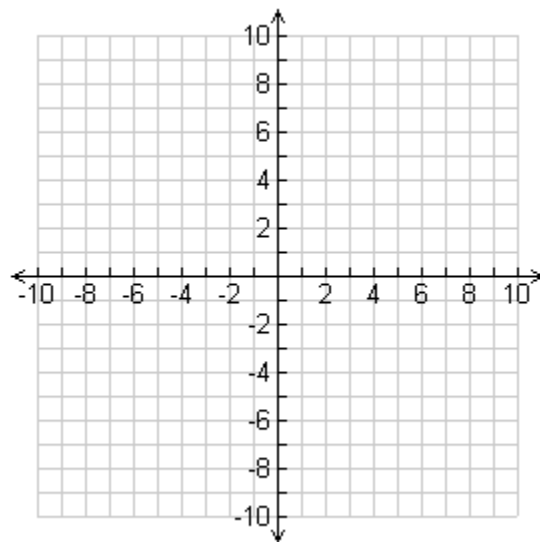
10.  $y = 8x^2 - 13$

Graph the radical function.

11.  $y = 2\sqrt{x+5} - 1$



12.  $y = \sqrt{x-4}$



15. Graph  $f(x) = |x| + 2$

Does the function have an inverse?  
Explain why or why not?

16. Graph  $f(x) = x^3$

Does the function have an inverse?  
Explain why or why not?

Verify that the functions are inverses.

9.  $f(x) = \frac{2x-1}{5}$        $g(x) = \frac{5x+1}{2}$

10.  $f(x) = 4x^2 - 5$        $g(x) = \sqrt{\frac{x+5}{4}}$