

You must complete this before retaking the MC again. Remember it is all about LEARNING so take your time and learn how to do these skills. If you need help please ask!

NAME: _____

Corrective Assignment 8.4

Directions: Find the inverse of each function.

1) $h(x) = \frac{8-2x}{6}$

2) $g(x) = 2x^5 - 8$

3) $f(x) = -6x^3 + 18$

4) $f(x) = (2x - 5)^2$

5) $g(x) = -3x + 14$

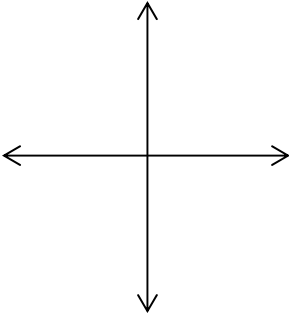
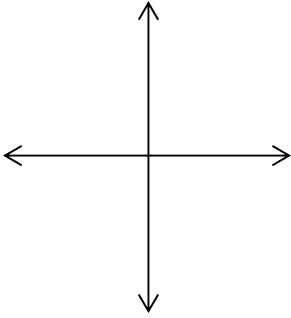
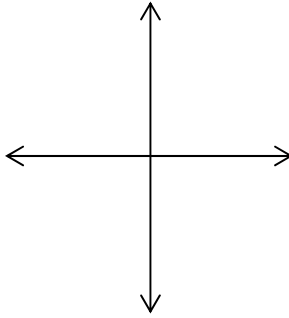
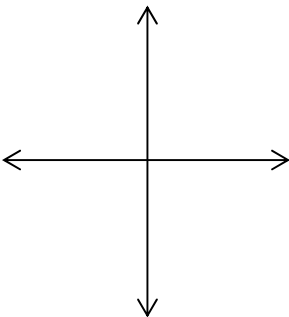
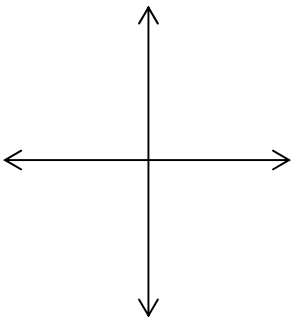
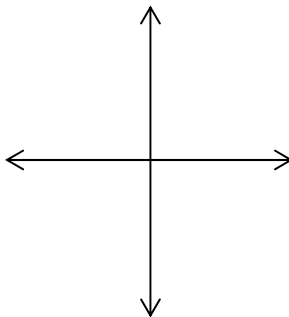
6) $h(x) = 6x^5 + 12$

7) $g(x) = \frac{3}{4}x^6 + 12$

8) $h(x) = -\frac{2}{5}x^5 + 10$

9) $f(x) = \frac{3x^2-9}{6}$

Directions: Determine if the two functions are inverses.	
10) $f(x) = 2x - 12$ and $g(x) = \frac{1}{2}x - 6$	11) $f(x) = 3x^2 - 12$ and $g(x) = \sqrt{\frac{x+12}{3}}$ for $x \geq 0$.

Directions: Sketch the graph and then determine whether or not the function's inverse is also a function.		
12) $h(x) = 3x^2 - 2x - 2$ 	13) $g(x) = - 2x - 3 + 2$ 	14) $f(x) = -\frac{5}{2}x + 3$ 
15) $n(x) = 2\sqrt[3]{x+3} - 4$ 	16) $l(x) = \frac{5}{2}x^4 - x - 3$ 	17) $h(x) = \frac{3}{2}\sqrt{x+3} + 3$ 

ANSWERS TO CORRECTIVE ASSIGNMENT:

Make sure you check all your answers and make sure you KNOW how to do all of them. You could simply copy answers but that's not the point. The point is that you have to learn how to do this so please make sure that for any you don't understand you get help BEFORE taking the Mastery Check again.

1) $f^{-1}(x) = -3x + 4$ 2) $f^{-1}(x) = \sqrt[5]{\frac{x+8}{2}}$ 3) $f^{-1}(x) = \sqrt[3]{-\frac{x-18}{6}}$ 4) $f^{-1}(x) = \frac{\pm\sqrt{x}+5}{2}$ 5) $f^{-1}(x) = -\frac{1}{3}x + \frac{14}{3}$

6) $f^{-1}(x) = \sqrt[5]{\frac{x-12}{6}}$ 7) $f^{-1}(x) = \pm\sqrt[6]{\frac{4}{3}(x-12)}$ 8) $f^{-1}(x) = \sqrt[5]{-\frac{5}{2}(x-10)}$ 9) $f^{-1}(x) = \pm\sqrt{2x+3}$ 10) Not Inverses

11) They are inverses 12) Inverse is not a function 13) Inverse is not a function 14) Inverse is a function

15) Inverse is a function 16) Inverse is not a function 17) Inverse is a function