

## SM3-A HW #6-4 (Inverse Functions)

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the inverse of each function.**

1)  $f(x) = \frac{2}{x+1} - 2$

2)  $g(x) = (x-1)^3 - 2$

3)  $f(x) = \frac{9}{10}x + \frac{1}{2}$

4)  $f(x) = 3 - \frac{4}{3}x$

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

6)  $f(x) = 3 + 2x^3$

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

8)  $g(x) = -\frac{3}{x-1} - 1$

9)  $g(x) = \frac{4}{-x-2} + 2$

10)  $g(x) = -\frac{3}{x+2} + 3$

Perform the indicated operation.

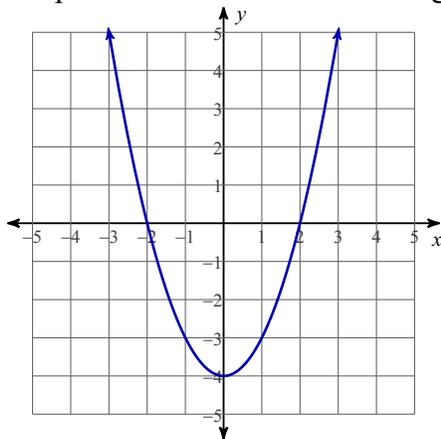
11)  $g(x) = -2x - 3$   
 $f(x) = 4x + 5$   
Find  $(g \circ f)(x)$

12)  $g(n) = 2n - 2$   
 $h(n) = n^2 - 1$   
Find  $(g \circ h)(n)$

13)  $f(n) = 4n$   
 $g(n) = 3n - 2$   
Find  $(f - 4g)(7)$

14)  $f(t) = 3t - 1$   
 $g(t) = t^2 + 1$   
Find  $(2f + 3g)(5)$

15) Graph the inverse of the following function on the same x-y plot



16) Graph the inverse of the following function on the same x-y plot

