Math-1050 Name_____

HW #26 (7.1: Inverse Functions)

Find the inverse of each function. Show your work.

1) $f(n) = \frac{4}{n+1} + 1$

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

3) $f(x) = -\frac{4}{x-1} - 3$

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

5) $g(n) = \frac{1}{n-1} + 1$

6) $f(n) = \frac{3}{-n-2} - 1$

7) $f(n) = 3 + 2n^5$

8) $g(n) = -\frac{2}{n+2} + 1$

9) $f(n) = \frac{4}{n+3}$

Prove that the given functions are inverses --> f(g(x)) = x AND (f(x)) = x Show your work.

10) $g(x) = -\frac{1}{5}x$
$f(x) = -5x$

11) $g(x) = 1 - \frac{3}{4}x$
$f(x) = -x + 1$

12) $f(n) = \frac{-2 + \sqrt[3]{4n}}{2}$
$g(n) = \sqrt[3]{n-3} - 2$

13) $f(x) = \sqrt[3]{x+3} - 1$
$g(x) = \sqrt[3]{x+2} - 1$