Honors Algebra 2 Name_____

Are these functions inverses of each other?

Verify that the given functions are inverses or not. Show the work required to verify inverse functions: f(g(x)) and g(f(x))

1) $g(x) = \frac{3x}{5}$

$f(x) = \frac{5x}{3}$

2) $g(x) = 4x + 4$

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

3) $h(n) = -n + 2$

$f(n) = \frac{-20 + 7n}{5}$

4) $g(x) = x - 1$

$f(x) = x + 1$

5) $f(x) = 7x + 5$

$g(x) = \frac{x - 5}{7}$

6) $f(x) = -(x - 1)^5$

$h(x) = -1 + (x + 2)^3$

7) $f(x) = (x - 1)^3 + 3$

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

8) $f(x) = \sqrt[3]{x + 2}$

$h(x) = -2x^3 + 2$

9) $f(x) = -\frac{2}{7}x + \frac{6}{7}$

$g(x) = -2x + 2$

10) $f(x) = x - 3$

$h(x) = x + 3$