Math 2 Name_____

PRACTICE Quiz 9.7 Inverse Functions (1 pt each, 8 pts total)

State if the given functions are inverses. (answer "YES" or "NO")

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

2) $f(x) = -2 + \frac{1}{5}x$
$h(x) = \frac{-4+x}{2}$

3) $f(x) = -\frac{4}{x-2}$
$g(x) = \frac{3}{x} + 1$

4) $g(x) = 3 - \frac{8}{5}x$
$f(x) = -\frac{5}{8}x + \frac{15}{8}$

Find the inverse of each function.

5) $g(x) = \frac{6 - \sqrt[5]{16x}}{2}$

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

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

8) $f(x) = -x^3 + 2$

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

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

No

3) $f(x) = -\frac{4}{x-2}$
$g(x) = \frac{3}{x} + 1$

No

4) $g(x) = 3 - \frac{8}{5}x$
$f(x) = -\frac{5}{8}x + \frac{15}{8}$

Yes

Find the inverse of each function.

5) $g(x) = \frac{6 - \sqrt[5]{16x}}{2}$

$g^{-1}(x) = -2(x-3)^5$

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

$f^{-1}(x) = 4x + 1$

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

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

8) $f(x) = -x^3 + 2$

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