Inverse Functions Practice

Name_____

Date_____ Period____

State if the given functions are inverses.

1) $g(n) = 5 + \frac{5}{2}n$

$f(n) = -\frac{1}{2}n + \frac{5}{2}$

No

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

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

Yes

Find the inverse of each function. State the domain and range of both functions.

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

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

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

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

Identify the domain and range of each.

5) $y = \sqrt{x - 4} - 1$

Domain: $x \geq 4$
Range: $y \geq -1$

6) $y = \sqrt{x + 5}$

Domain: $x \geq -5$
Range: $y \geq 0$

7) $y = \frac{1}{2}\sqrt{x + 2}$

Domain: $x \geq -2$
Range: $y \geq 0$