

Name _____ Block _____

Find the inverse, state any restrictions on x

1) $f(x) = 4x + 5$

2) $f(x) = x^2 + 3, x \geq 0$

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

4) $f(x) = \sqrt{x + 1}$

Verify that f and g are inverse functions.

5) $f(x) = \frac{1}{2}x - 4; g(x) = 2x + 8$

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

7) $f(x) = 3x^3 + 1; g(x) = \left(\frac{x-1}{3}\right)^{\frac{1}{3}}$

8) $f(x) = \frac{1}{3}x^2; g(x) = (3x)^{\frac{1}{2}}$