



# Inverse of Square Root Function

Version 1

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_

Direction: Find the inverse of each function, and state its domain and range. Show all your work in the space provided.

1)  $f(x) = \sqrt{x-2}$ ,  $x \geq 2$

2)  $f(x) = -\sqrt{x+2}$ ,  $x \geq -2$

3)  $f(x) = \sqrt{4-x^2}$ ,  $-2 \leq x \leq 0$



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Direction: Find the inverse of each function, and state its domain and range. Show all your work in the space provided.

1)  $f(x) = \sqrt{x-2}$ ,  $x \geq 2$

$f^{-1}(x) = x^2 + 2$ ; Domain:  $x \geq 0$ , Range:  $y \geq 2$

2)  $f(x) = -\sqrt{x+2}$ ,  $x \geq -2$

$f^{-1}(x) = x^2 - 2$ ; Domain:  $x \leq 0$ , Range:  $y \geq -2$

3)  $f(x) = \sqrt{4-x^2}$ ,  $-2 \leq x \leq 0$

$f^{-1}(x) = -\sqrt{4-x^2}$ ; Domain:  $0 \leq x \leq 2$ , Range:  $-2 \leq y \leq 0$