



p. 448 #13 (find inverse)

$$y = -\sqrt{x-1}$$

$$D: x \geq 1$$

$$R: y \leq 0$$

$$x = -\sqrt{y-1}$$

$$x-1 \geq 0$$

$$-\sqrt{y-1} = x$$

$$(\sqrt{y-1})^2 = (-x)^2$$

$$y-1 = x^2$$

$$y = x^2 + 1$$

$$D: x \leq 0$$

$$R: y \geq 1$$

square both sides

"identity" relation (function):

output = input

$$y = x$$

composition of function with its inverse:

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

"identity" relation

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