

Exercise 25

Find a formula for the inverse of the function.

$$y = \ln(x + 3)$$

Solution

Solve for x .

$$e^y = e^{\ln(x+3)}$$

$$e^y = x + 3$$

$$x = e^y - 3$$

This inverse function gives the value of x corresponding to output y . One could make it its own function by calling x y^{-1} and replacing y with x .

$$y^{-1} = e^x - 3$$