Finding the Equation of the Inverse of y = f(x)

For a one-to-one function f defined by an equation y = f(x), find the defining equation of the inverse as follows. (You may need to replace f(x) with y first.)

Step 1 Interchange x and y.

Step 2 Solve for y.

Step 3 Replace y with $f^{-1}(x)$.