

By convention, we normally write our rules in terms of  $x$

$$\frac{y-15}{2} = f(y) \text{ as } \frac{x-15}{2} = f(x)$$

But, that's confusing having 2  $f(x)$ 's

So we create new notation, identifying the inverse as

$$f^{-1}(x) = \frac{x-15}{2}$$

That is read the inverse of  $f$  is  $\frac{x-15}{2}$ .