

# Inverse Functions

**Inverse functions** are functions which reverse or “undo” another function.

To write the inverse of the function  $f$ , we use the notation  $f^{-1}$ .

 **Example** Find the inverse of  $f(x) = 5x + 3$

write the function  
using a “ $y$ ”



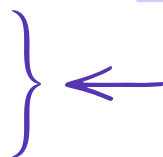
$$5y + 3 = x$$



set equal  
to “ $x$ ”

$$5y = x - 3$$

$$y = \frac{x - 3}{5}$$



rearrange  
to make  $y$   
the subject

use  $f^{-1}$   
notation



$$f^{-1} = \frac{x - 3}{5}$$