

1.2 Inverses

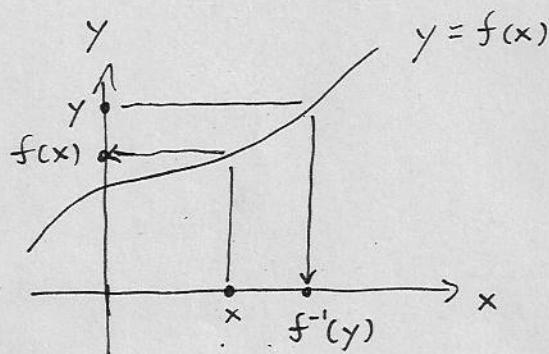
$$x \rightarrow \boxed{f} \rightarrow \bullet \text{ many } y$$

$$x \leftarrow \boxed{f^{-1}} \leftarrow \bullet \text{ many } y$$

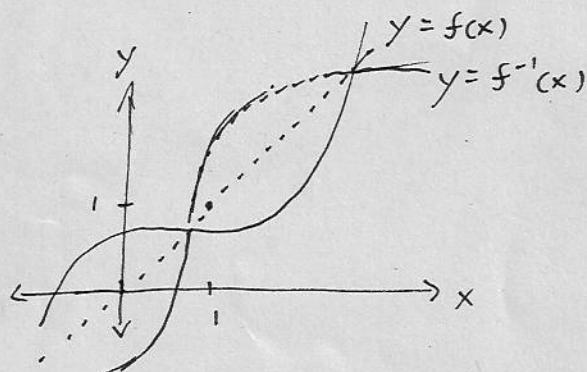
If f has an inverse, then it is defined by:

$$f^{-1}(y) = x \text{ means } y = f(x).$$

In particular, $f^{-1}(y)$ is the number that f sends to y .



The graph of f^{-1} is the reflection of f about the line $y=x$, provided the x - and y -axes are scaled the same.



$$F = \frac{9}{5}C + 32 \quad F = f(C) \quad \text{Find } f^{-1}(F).$$