

## 5 Example

Find the inverse function  $f^{-1}(x)$  for the given function  $f(x)$ .  
Use composition to verify that the functions are inverses.  
Then graph the function and its inverse.

$$* f(x) = -5x + 5$$

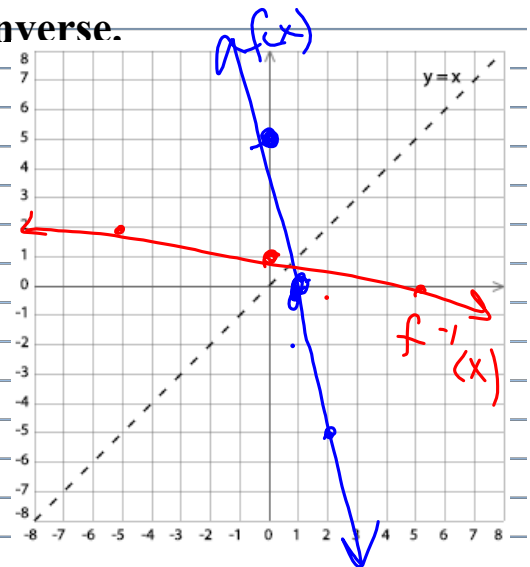
$$y = -5x + 5$$

$$x = -5y + 5$$

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

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

$$* f^{-1}(x) = -\frac{1}{5}x + 1$$



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$$f(x) = 3x + 6 *$$

$$y = 3x + 6$$

$$x = 3y + 6$$

$$x - 6 = 3y$$

$$\frac{x-6}{3} = y$$

$$f^{-1}(x) = \frac{x-6}{3}$$

$$f^{-1}(x) = \frac{1}{3}x - 2$$

