

Algebra 2 Tues. 10-23-12

CLASS NOTES

$$f(x) = 5 - 2x$$

$$y = 5 - 2x$$



$$x = 5 - 2y$$

$$\frac{2y}{2} = \frac{5-x}{2}$$

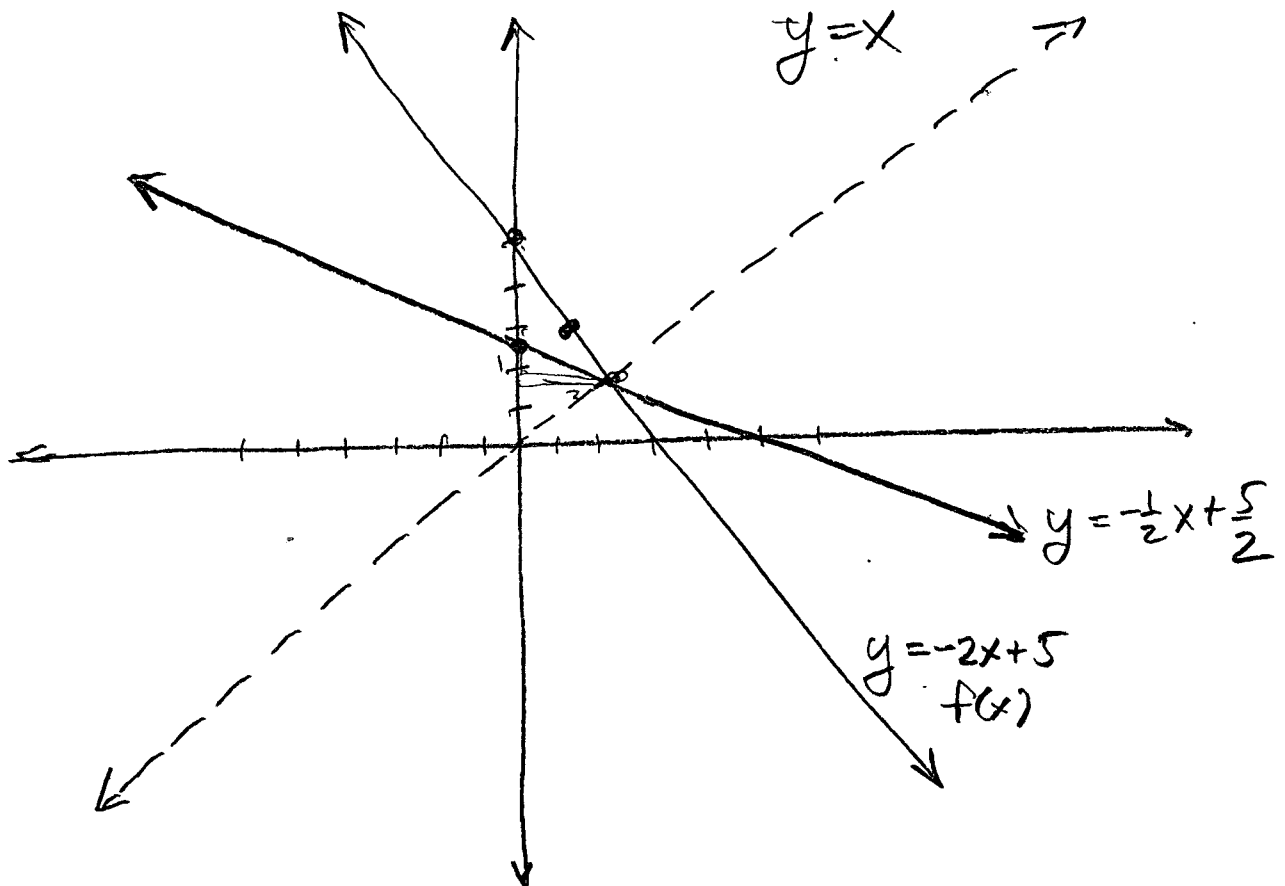
$$y = -\frac{1}{2}x + \frac{5}{2}$$

$$f(x) = -\frac{(x-5)}{-2}$$

$$f^{-1}(x) = -\frac{1}{2}x + \frac{5}{2}$$

undo to
 $y = x$

⇒ SWITCHING x, y &
SOLVING FOR y



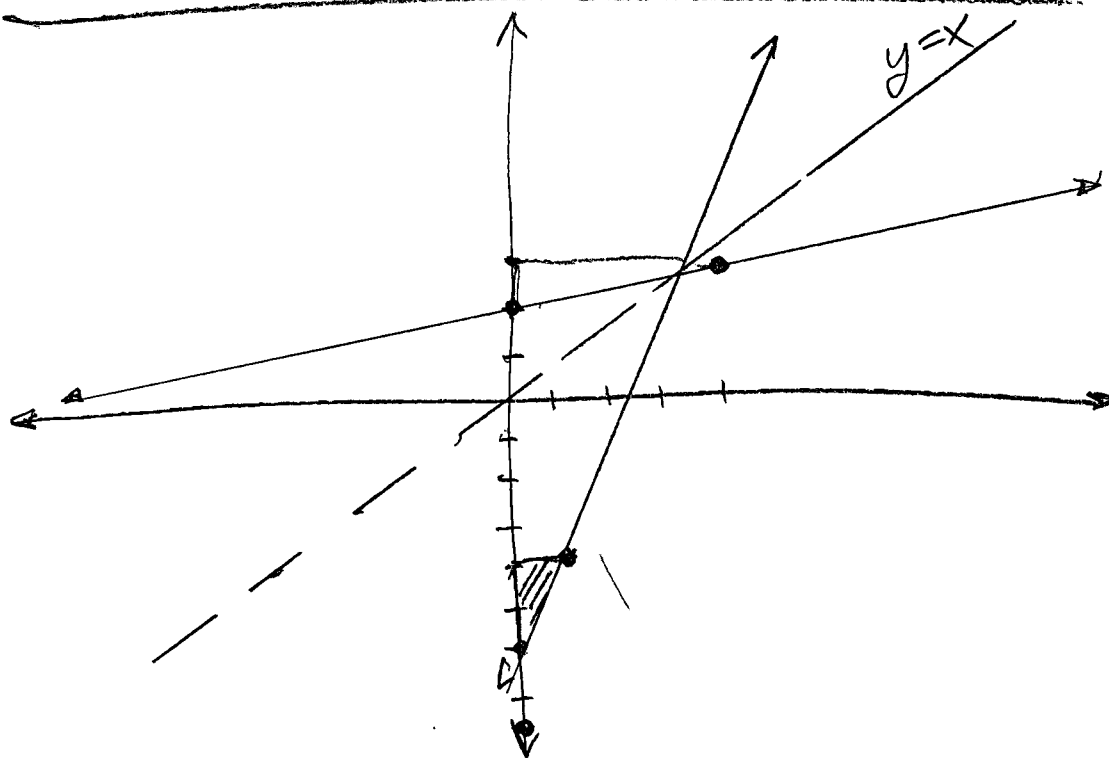
$$f(x) : y = \frac{x}{4} + 2$$

$$f^{-1}(x) : x = \frac{y}{4} + 2$$

$$4(x-2) = \frac{y}{4} \cdot 4$$

$$y = \frac{1}{4}x + 2$$

$$4x - 8 = y$$



$$(8) \log_{0.9}(0.81) = 2$$

$$\boxed{0.9^2 = 0.81}$$

$$(10) \log_7 343 = x$$

$$\boxed{7^x = 343}$$

$$\begin{array}{r} 49 \\ \times 7 \\ \hline 343 \end{array}$$

$$\boxed{x=3}$$

$$(12) \log_{0.5}(0.25) = x$$

$$(0.5)^x = 0.25 \quad \left(\frac{1}{2}\right)^x = \frac{1}{4}$$

$$\boxed{x=2}$$