1. The table of values below comes from a linear function. Create a table of values for the inverse by switching the columns. Use this new table of values to write the equation of the inverse.

Original Linear Function:

oga	
X	Υ
1	-1
2	-6
3	-11
4	-16
5	-21

Inverse:

X	Υ

Equation of the inverse:

2. Write the equation for the inverse of each linear function by first rewriting each equation by switching xand y, then resolving the new equation for y.

a) 
$$y = 7x + 15$$

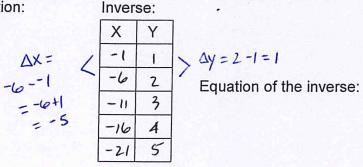
b) 
$$y = \frac{3}{2}x - 11$$

## Bellwork Alg 2 Wednesday, September 25, 2019

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Original Linear Function:

X	Υ
1	-1
2	-6
3	-11
4	-16
5	-21



$$\begin{vmatrix} Y \\ I \\ 2 \\ 3 \\ 4 \\ 5 \end{vmatrix}$$

$$m = \frac{L}{-5}$$

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

using  $(-1/1)$  to find

y-int:

 $1 = -\frac{1}{5}(-1) + b$ 
 $1 = \frac{1}{5} + b$ 
 $-\frac{1}{5} - \frac{1}{5}$ 
 $b = \frac{4}{5}$ 

$$y = -\frac{1}{5}x + \frac{4}{5}$$

2. Write the equation for the inverse of each linear function by first rewriting each equation by switching 
$$x$$
 and  $y$ , then resolving the new equation for  $y$ .

a) 
$$y = 7x + 15$$

$$\frac{x-15}{7} = \frac{7y}{7}$$

EQUATION 
$$y = \frac{X-15}{7} = \frac{15}{7} = \frac{15}{7} = \frac{15}{7} = \frac{15}{7} = \frac{15}{7}$$

INVERSE

b) 
$$y = \frac{3}{2}x - 11$$

$$X = \frac{3}{2}y - 11 + 11$$

$$\frac{2}{3}(x+1) = \frac{3}{2}y \cdot \frac{2}{3}$$

EQUATION
$$y = \frac{2}{3}(x+11) = \frac{2}{3}x + \frac{22}{3}$$
INVERSE