3. Given the equation of a line in Standard Form, find the x-intercept and the y-intercept.

EQ: $10x - 6y = 30$ x-int= 3 y-int= −5

$\frac{10x}{10} = \frac{30}{10}$ $\frac{-6y}{-6} = \frac{30}{-6}$

4. Write the equation of the equation of the line that passes through the two given points.
Give your answer in Point-Slope Form.

$(5,6)\&(-1,8)$ q $EQ:$

$m = \frac{8-6}{-1-5} = \frac{2}{-6} = \frac{1}{-3}$

$y - 8 = -\frac{1}{3}(x+1)$

OR

$y - 6 = -\frac{1}{3}(x-5)$

5. Write the equation of the equation of the line that passes through the two given points.
Give your answer in Slope-Intercept Form.

$y = mx + b$

$(4,5)\&(-6,10)$ q $EQ:$

$y - 5 = -\frac{1}{2}(x-4)$

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

$+5 \quad +5$

$y = -\frac{1}{2}x + 7$

$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{10-5}{-6-4}$

$\frac{5}{-10} = -1/2$

Real Life examples of Functions and Nonfunctions:

You look up a word in the dictionary to get a definition:

Input (domain): A word
Output (range): Definition NO

A policman looks up a license plate number to find who it is registered to:

Input (domain): License plate number
Output (range): Who the car is registered to Yes

9q1

Real Life examples of Functions and Nonfunctions:

The IRS looks up a Social Security Number to find out who the tax return if for:

Input (domain): Social Security Number
Output (range): Taxpayers Name

Yes

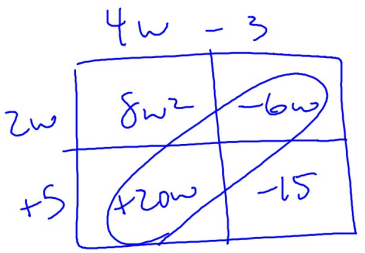
You look up a friend's name in your address book to find a number you can call them at:

Input (domain): Friend's name
Output (range): Phone number

NO

Expand:

(4w - 3)(2w + 5)



$= 8w^2 + 14w - 15$

Factor: $20x^2 - 3x - 2$ $= (4x+1)(5x-2)$

ax^2+bx+c