Name: $\qquad$ Date: $\qquad$
Notes
Algebra Section 3.8
Pages 184-189
Goal: "I will rewrite equations and formulas"

Ex: Solve $a x+b=c$ for $x \quad$ This means to:

Solve the following equations for the given variable.
Ex: Solve $A=1 / 2 b h$ for $h$
Find $h$ if the shown triangle has an area of $64.4 \mathrm{~m}^{2}$


Ex: $p+q x=r$ for $x$

Ex: $A=l w$ for $l$, then find $l$ if $A=351 \mathrm{~cm}^{2}$ and $w=13 \mathrm{~cm}$

Ex: You are visiting Toronto over the weekend and look up a weather forecast. Find the low temperatures for Saturday and Sunday in degrees Fahrenheit. First rewrite the conversion formula so $F$ is isolated:

$$
C=\frac{5}{9}(F-32)
$$

|  | Friday | Saturday | Sunday |
| :---: | :---: | :---: | :---: |
| Forecast | Sunny | Sunny | Partly Cloudy |
| High | $21^{\circ} \mathrm{C}$ | $22^{\circ} \mathrm{C}$ | $16^{\circ} \mathrm{C}$ |
| Low | $13^{\circ} \mathrm{C}$ | $14^{\circ} \mathrm{C}$ | $10^{\circ} \mathrm{C}$ |

## **RECALL THAT ALL FUNCTIONS START WITH: **

So when you are rewriting an equation so it is in function form that means to isolate:

Ex: $-2 x+3 y=6$
Ex: $3 x+2 y=8$

Ex: $4 x-2 y=-6$
Ex: $-3 x-y=7$

Ex: $8 x+2 y=-2$
Ex: $-5 x-y=10$

