$\qquad$ Date: $\qquad$

## Use Intercepts to Graph Linear Equations Notes

## Objective: Graph the equation of a line in both standard and slope-intercept form.

Change the equation into slope-intercept form, or find the $x$ and $y$-intercepts, then graph.
X-intercept - Where the graph crosses the $x$-axis $(y=0)$
$\underline{Y}$-intercept - Where the graph crosses the $y$-axis $(x=0)$

1a. $4 x+y=8$

$$
\begin{aligned}
-4 x \quad & -4 x \\
y= & -4 x+8
\end{aligned}
$$

1b. $4 x+y=8$

$$
\begin{array}{ll}
\text { X-intercept }(\boldsymbol{y}=\mathbf{0}) & 4 x+0=8 \\
& x=2
\end{array}
$$

$$
\begin{array}{ll}
\text { Y-intercept }(\boldsymbol{x}=\mathbf{0}) & 4(0)+y=8 \\
& y=8
\end{array}
$$



2a. $-3 x+5 y=15$
2b. $-3 x+5 y=15$


3. $5 x-y=4$

5. $x=-6$

4. $7 y=28$

6. $9 x-6 y=54$


