S 3.1 \#s 13-33
Do \#s 1-12 if you meed brush-up on now to locate points in the plane.
Inn going to JRY to get you away from tickomanks on the axes \& go for am "ordered pair" and its "general location."
 understand what's going on, in GENERAL!

TH $y=\frac{1}{3} x, y=\frac{1}{3} x+1$ of $y=\frac{1}{3} x-3$
on same set of axes.
NOTE: Graphs meed intercepts labeled, but NOT A BUNCH of JICKMAREK!


LEARN $y=x^{2}$ shape!

looks a bit like a"u"

Don't waste time on tick marks Get the sHAPE \& General location.

Quality $>$ Quantity.
Biggest student enron is getting quantity perfect and ending up with a graph like? which Get the sucks.
sucks.
$y=2 x^{2}$. just multiply $y$-values in $y=x^{2}$ by 2 ; it's twice as tall!

$x$-intercepts:

$$
\left.\begin{array}{c}
y=2 x^{2}-8=0 \\
2\left(x^{2}-4\right)=0 \\
x^{2}-4=0 \\
x-2)(x+2)=0 \\
x=2 \text { OR } x=-2
\end{array}\right)
$$

$$
y=2 x^{2}-8
$$


\$18 Graph .05 $x-.03 y=.15$
$A x+B y=C$ is best for istencept method.

| $x$ | $y$ |
| :---: | :---: |
| 0 | -5 |
| 3 | 0 |

$$
\begin{aligned}
& .05(0)-.03 y=.15 \Longrightarrow-.03 y=.15 \\
& \\
& \Rightarrow y=\frac{.15}{-.03}=-5 \\
& .05 x-.03(0)=.15
\end{aligned}
$$



$$
\begin{aligned}
& .05 x-.03(0)=.15 \\
& .05 x=.15 \\
& x=\frac{.15}{.05}=3 \\
& (0,-5) \sum_{\substack{\text { nder } \\
\text { step }}}^{(3,0)} \frac{\text { Resfeot! }}{x}
\end{aligned}
$$

$S 3,2 \# 51-17,21,29,30$

$$
m=\frac{\text { Rise }}{\text { Rim }}=\frac{y_{2}-y_{1}}{x_{2}-x_{1}}=\frac{\Delta y}{\Delta x}
$$

$<(-2,7)$

$$
\left(x, y_{1}\right)
$$



$$
\begin{aligned}
& m=\frac{3-7}{5-(-2)}=\frac{-4}{7} \text { y } \\
& \text { Always SR un Right }
\end{aligned}
$$

$3.3 \# s \frac{1-21}{6}: y=m x+b$
8'3.3 \#s 1-37 odds
Ang lin gaphs, Show all intercepts in addition to any special instuuctions?
\# $23-31$
use $y=m\left(x-x_{1}\right)+y_{1}$, sather
than
$y-y_{1}=m\left(x-x_{1}\right)$, which I hate,
\#s 33-37 $y=m\left(x-x_{1}\right)+y_{1}$ is sloint siope $y=m x+b$ is \#2 slope-intersept

$$
\begin{aligned}
& A x+B y=C \text { is } 3 \text { "Standand" } \\
& \text { "General" }
\end{aligned}
$$

