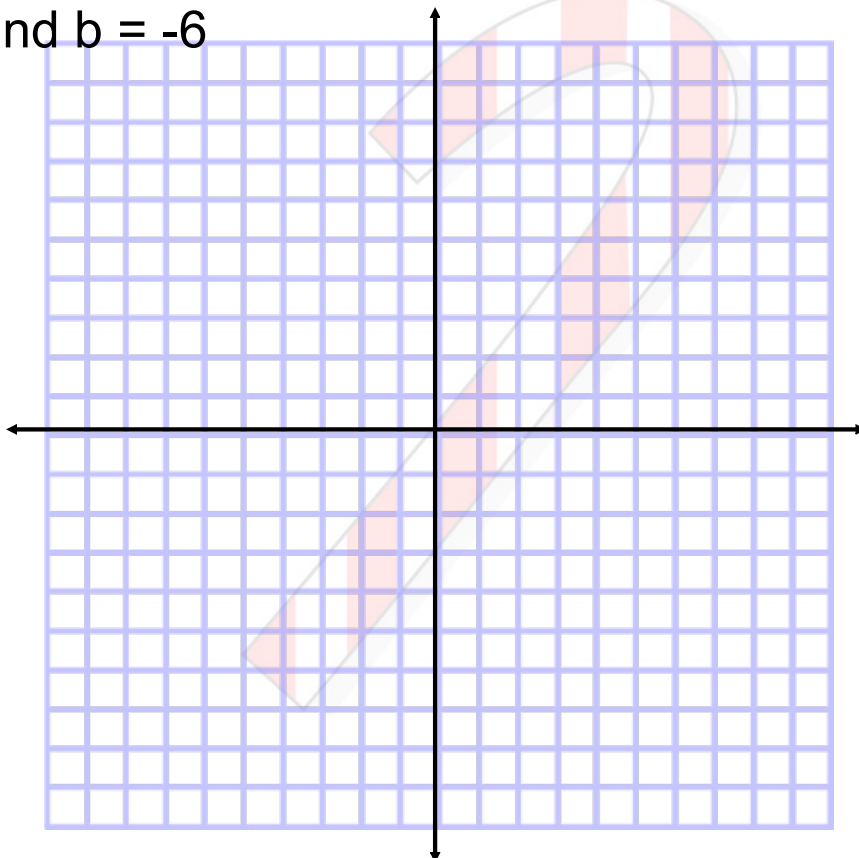


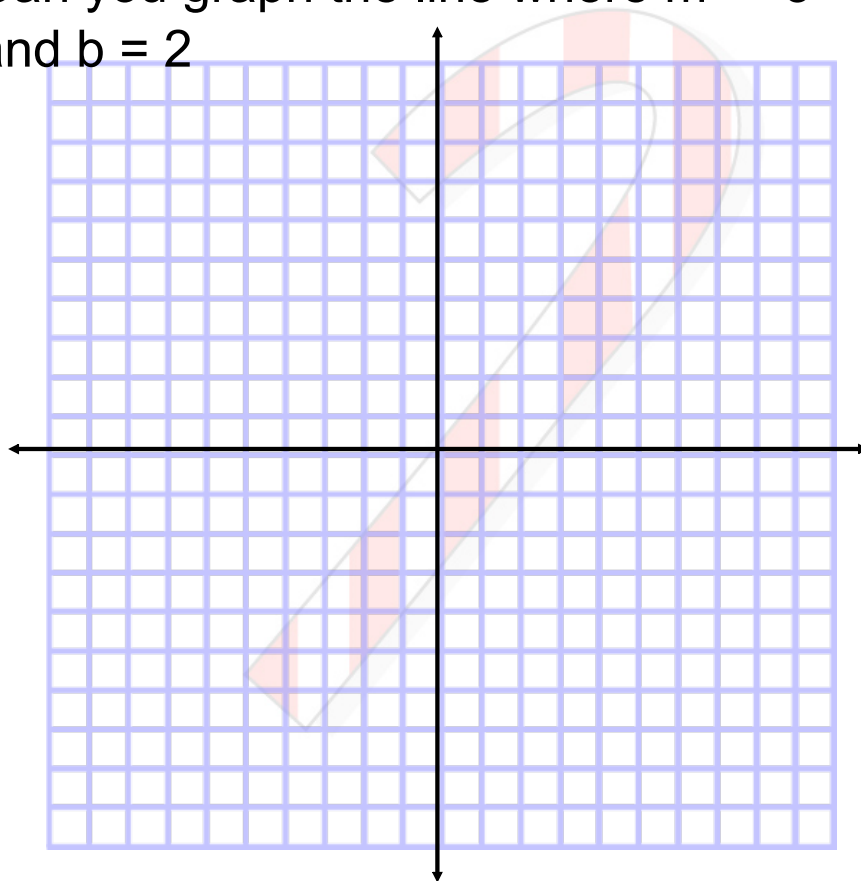
3.E.2 & 3 Graphing lines given a point and slope **or** two points

We have been practicing graphing lines in $y = mx + b$ form. We need **m** (slope) and **b** (y intercept) in order to graph them. We BEGIN on the y axis with the **b** value, then use the **m** (rise over run) to get to the next point.

Can you graph the line where $m = 2/3$ and $b = -6$



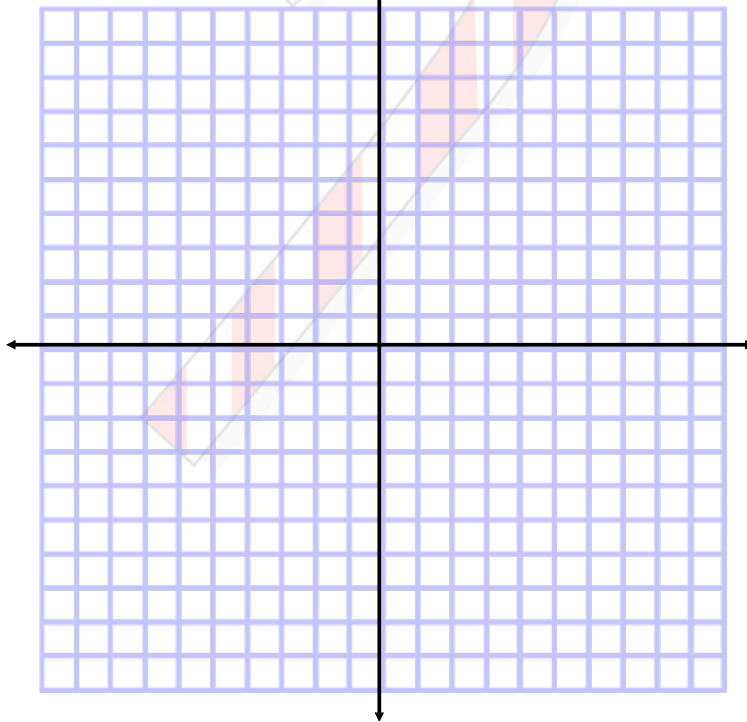
Can you graph the line where $m = -3$
and $b = 2$



What
happens if we
are given a
point and a
slope
instead?

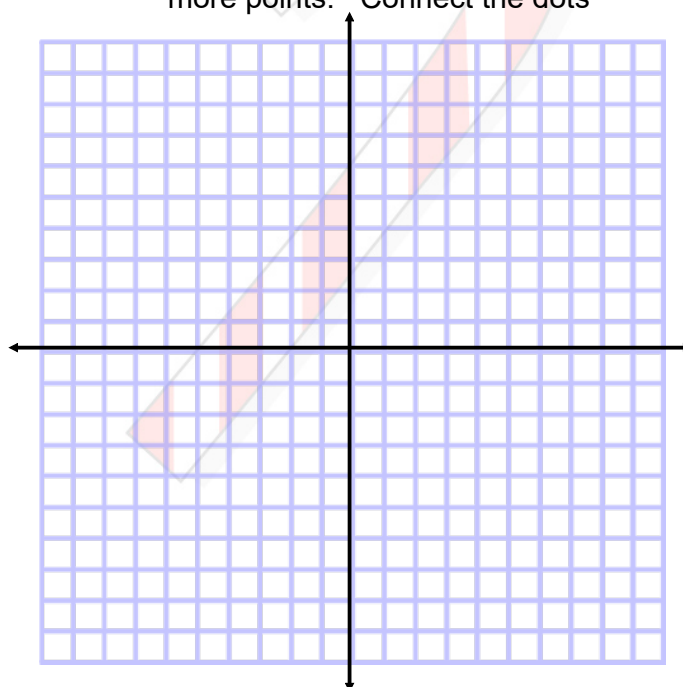
Can you graph the line that goes through the point $(3, 5)$ and has a slope of $\frac{2}{3}$?

Plot the following point $(3,5)$. Starting at $(3,5)$, use the slope of $\frac{2}{3}$ (rise 2, run 3) to plot another point. Continue using the slope and plot more points. Connect the dots.



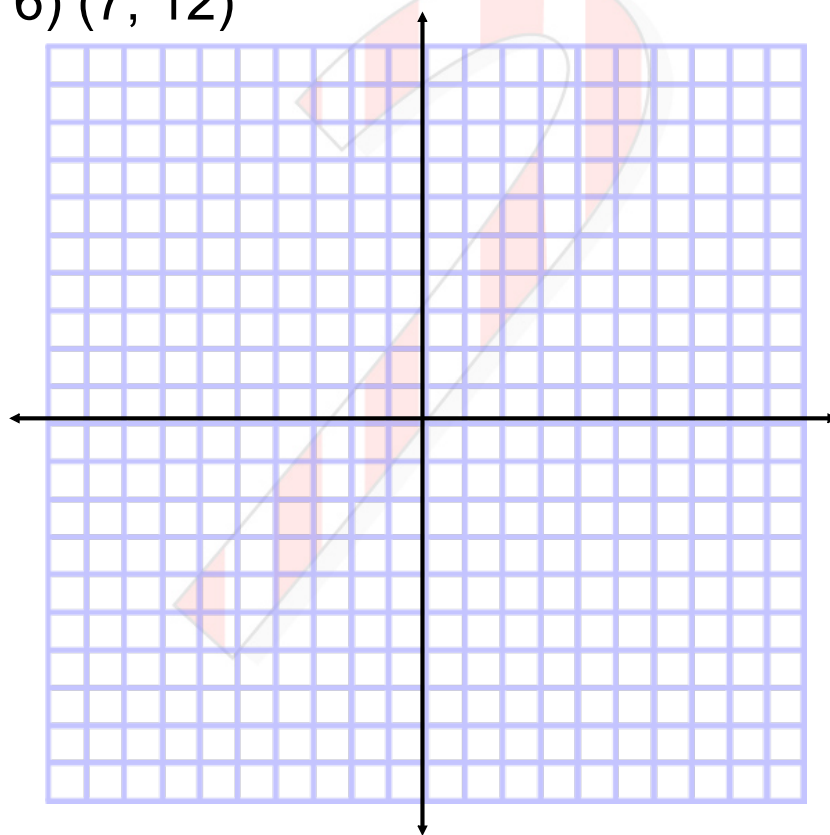
Can you graph the line that goes through the point $(-4, 2)$ and has a slope of $-\frac{1}{2}$?

Plot the following point $(-4, 2)$. Starting at $(-4, 2)$, use the slope of $-\frac{1}{2}$ to plot another point. Continue using the $-\frac{1}{2}$ slope and plot more points. Connect the dots.

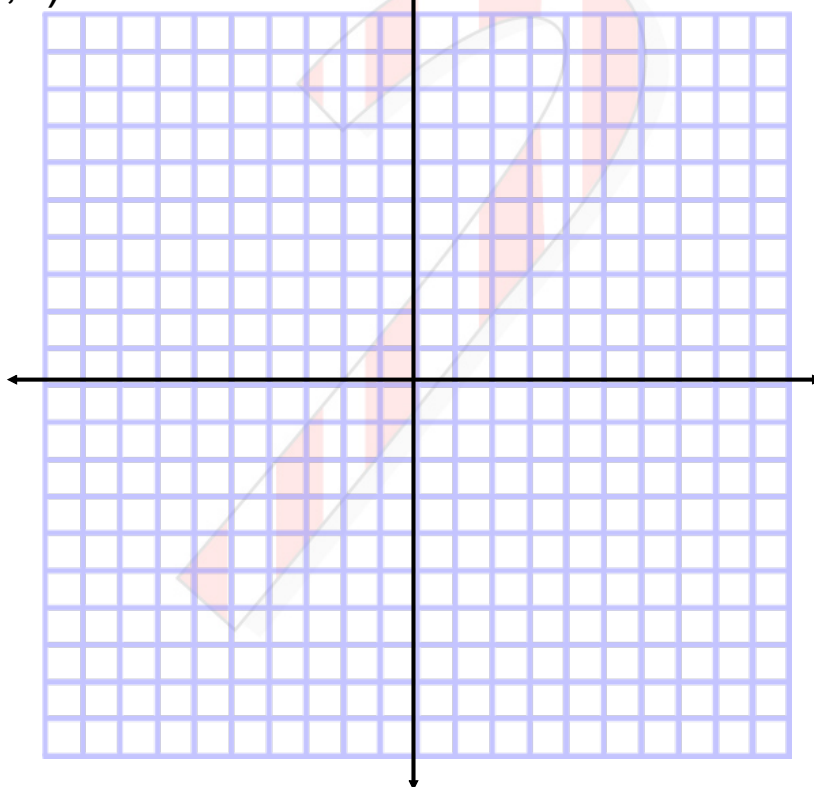


Can you graph a line given only two points?

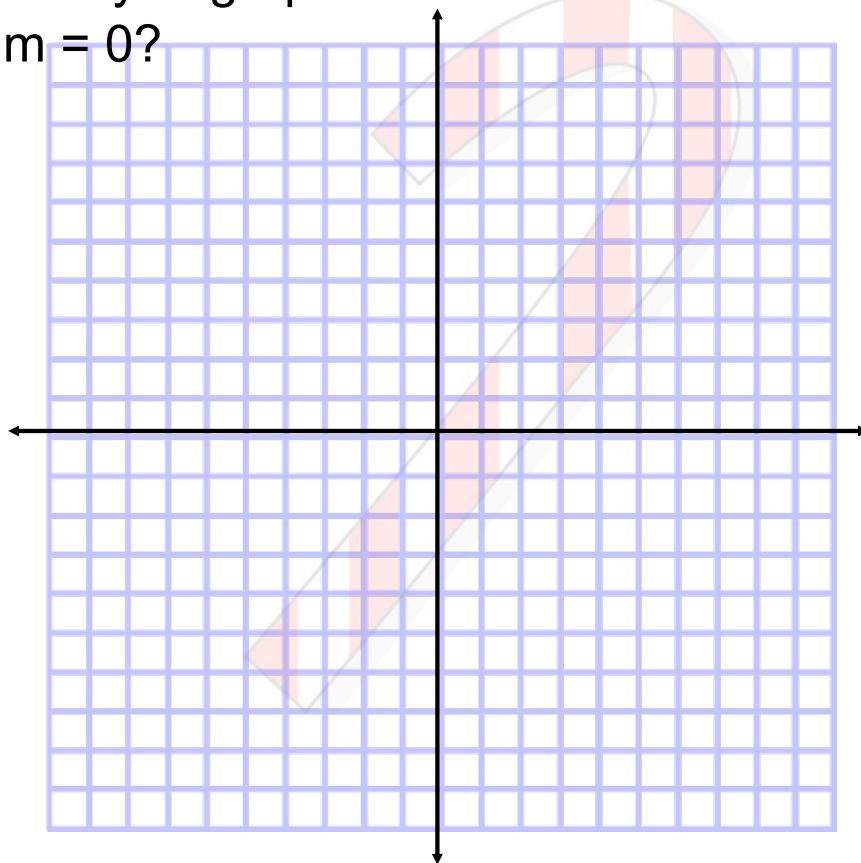
$(4, 6)$ $(7, 12)$



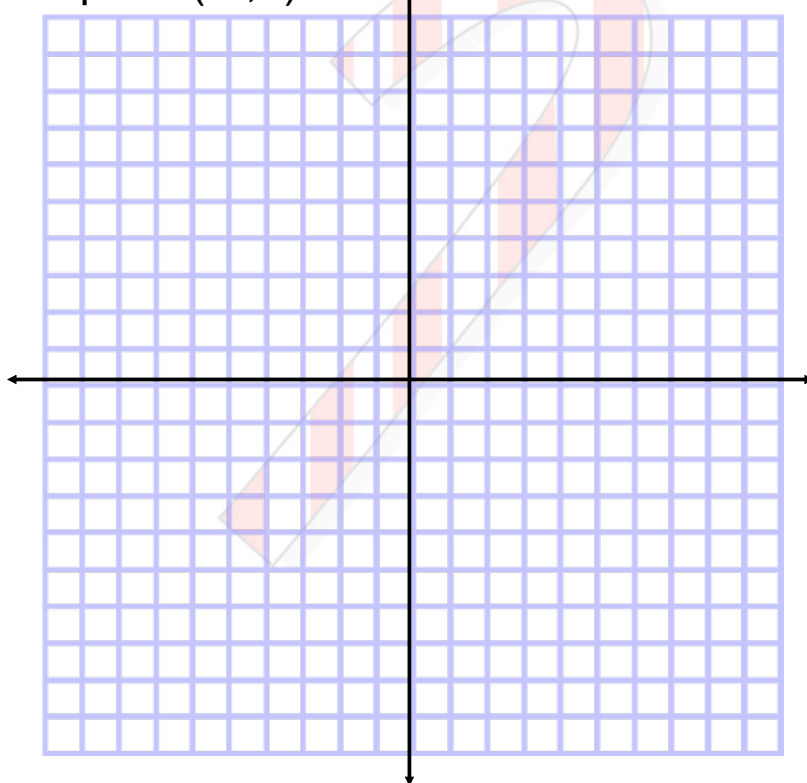
Can you graph the line that goes through $(-3, 5)$ and is horizontal?



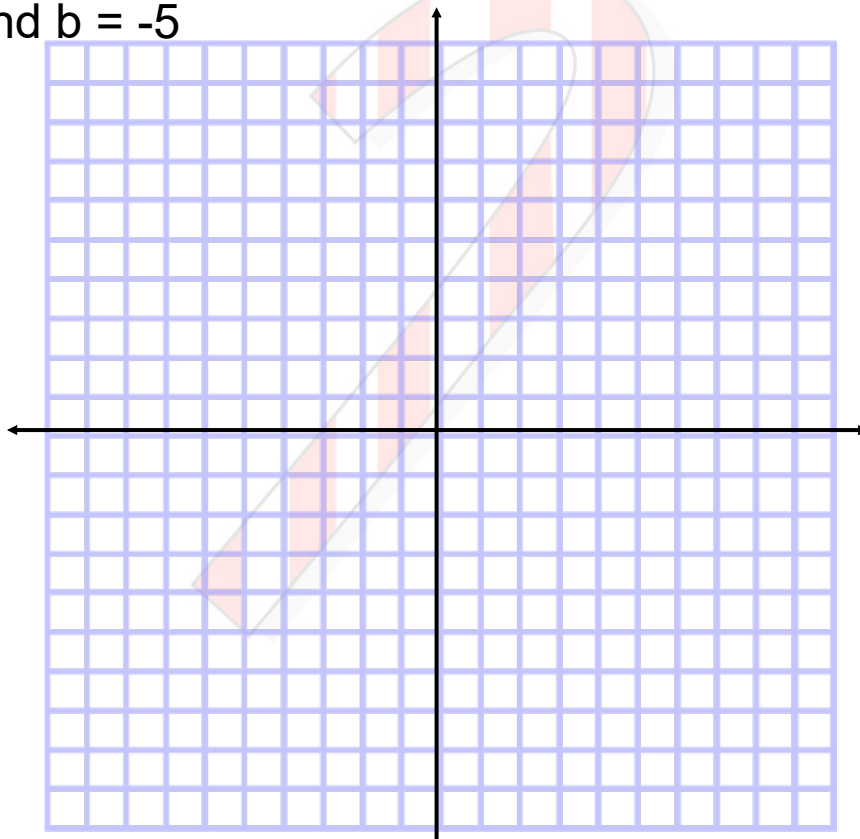
Can you graph the line where $b = 5$ and $m = 0$?



Can you graph the line that passes through the point $(-3, 4)$ that has an undefined slope?



Can you graph the line where $m = \frac{3}{4}$
and $b = -5$



Can you draw a line that goes through the
origin and has a slope of $-\frac{1}{5}$?

