Latex Tikz Examples, Annotate on Graph

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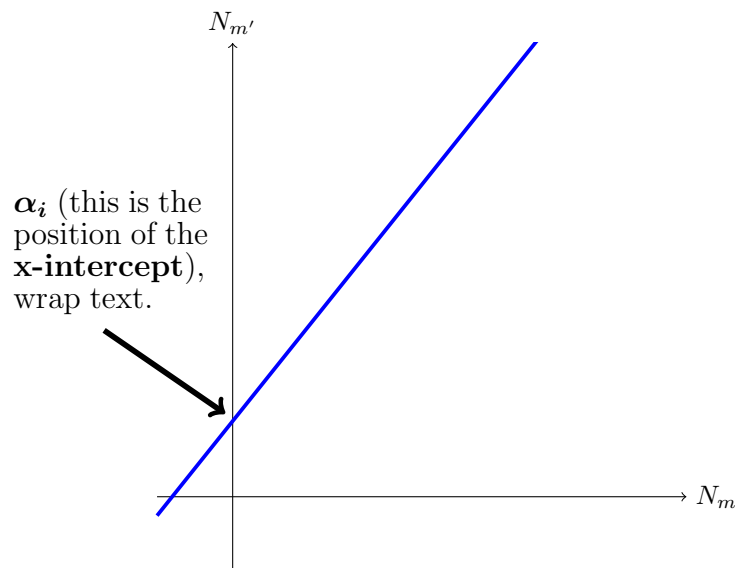
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1 Annotate Text in Figure

1.1 Slope and Intercept Annotate

Draw axis below, and a line, middle of page, and annotate the slope of the intercept with arrows. Annotate with box without color.

```
\begin{center}
\begin{tikzpicture}
\draw (0,2) -- (0.25*\textwidth,2);
\draw (0,1) -- (0.5*\textwidth,1);
\end{tikzpicture}
\end{center}
```


1.2 Anote Slope, X intercept and Y intercept

Draw a line, then point to its slope, x and y intercepts.

1. Define the slope and y-intercept: a_i, b_i

2. Define and calculate the x-intercept: $c_i = -\frac{a_i}{b_i}$

3. Define the text that should appear for each element: a_{desca}

4. Drawing lines pointing to a, b or c points:

(a) direction: $d_i \in \{NE, SE, SW, NW\}$

1 out of 4 possibilities.

5. For each direction, choose degree from left to right, then choose width from orgin to start point

$\boldsymbol{\alpha_i}$ (this is the position of the **x-intercept**), wrap text.