

10/11 non proportional Relationships

the relationship between two quantities
 y/x is not constant. A linear equation
contains ordered pairs that form
a line (not through the origin)

$$\text{Equation: } y = mx + b$$

↓ ↓

slope y-intercept $(0, b)$

rate of change/slope $\frac{\Delta y}{\Delta x}$ is constant

Graphing using slope-intercept:

- Start at the y-intercept $(0, b)$
- Use the slope to find the rest of the points by the $\frac{\text{rise} \updownarrow}{\text{run} \rightarrow}$

remember: pos: ↗ neg: ↘
watch the scale

Writing an equation from a table:

- find the slope $\Delta y / \Delta x$
- use the pattern to find $(0, b)$
when not given