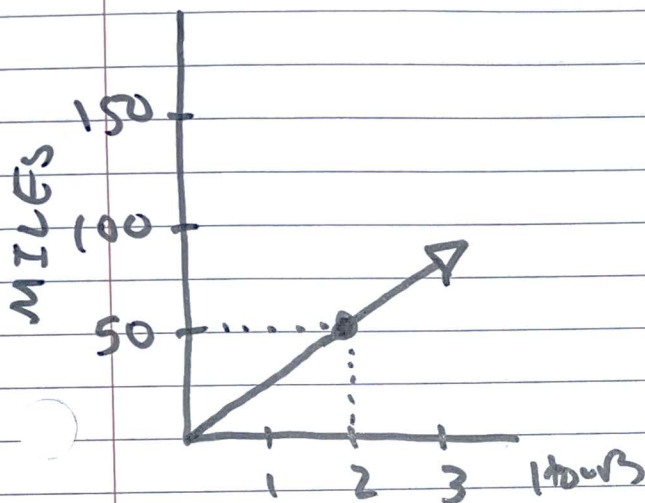


Lesson 3-2 → Seventh Grade $y = rx$
to Eighth Grade $y = mx + b$

Seventh
Grade



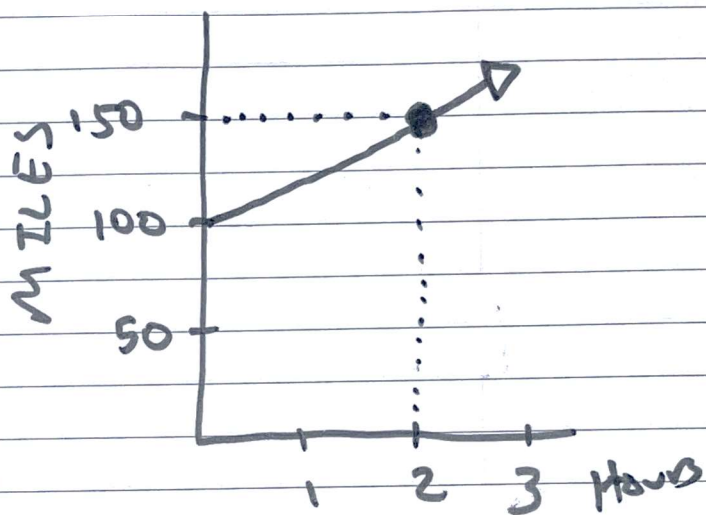
$$\text{steepness} = \frac{y}{x} = \frac{50}{2}$$

25

Equation: $y = rx$

$$y = 25x$$

Eighth
Grade



$$\text{steepness} = \text{slope}$$

$$\text{Slope} = \frac{\text{Rise}}{\text{Run}} = \frac{50}{2}$$

25

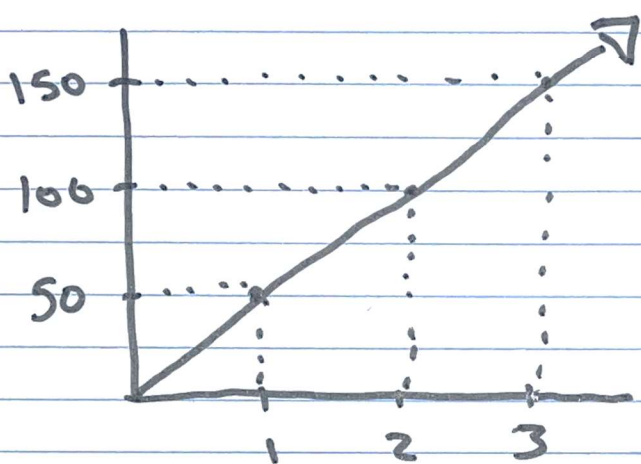
Equation: $y = mx + b$

y -intercept!

$$y = 25x + 100$$

Some more good news!

$y = mx + b$ works for
proportional relationships too!



$$y = mx + b$$

Slope \nearrow
y-intercept \nearrow

$$\frac{\text{Rise}}{\text{Run}} = m = 50 \quad b = 0$$

$$y = 50x + 0$$

$$y = 50x$$