

Graphs

To "see" the relation between 2 variables

Direct relation

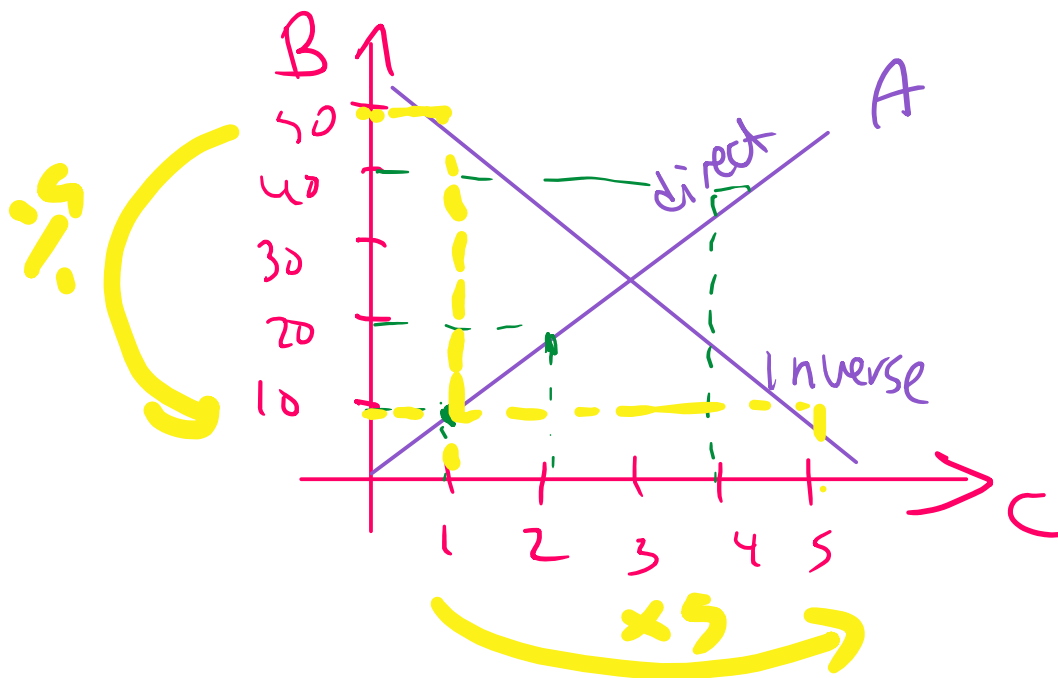
$$A \uparrow \propto B \uparrow$$

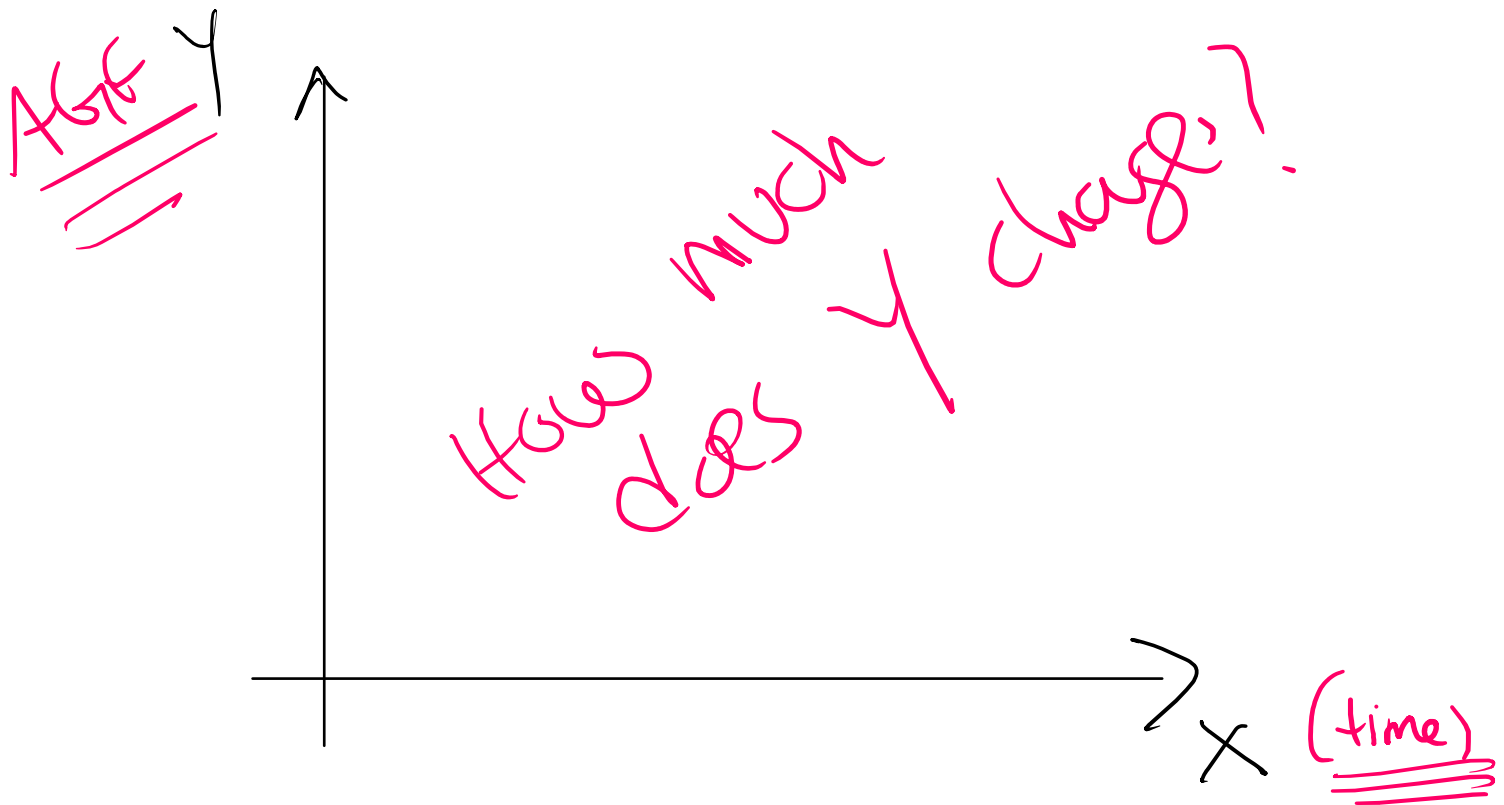
Inverse relation

$$A \uparrow \propto \frac{1}{B \downarrow}$$

$$A = \frac{B}{C} \quad \begin{matrix} \text{value} & \text{numerator} \\ 2 \downarrow = \frac{10}{5 \uparrow} & \text{denominator} \end{matrix} \rightarrow 4 = \frac{20}{5}$$

$$1 = \frac{10}{10}$$

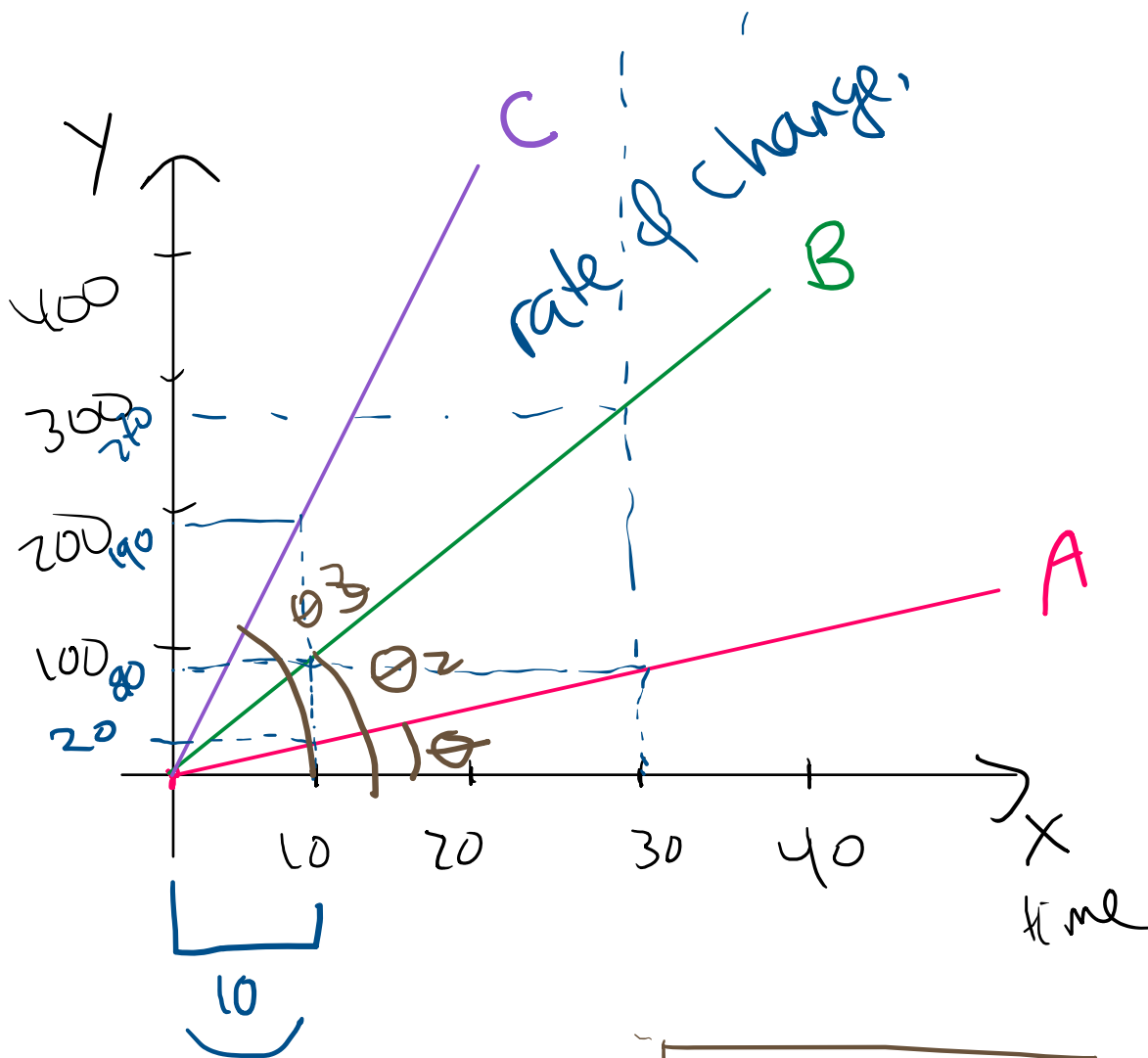




Dependent variable y

Independent variable x

When x changes, it causes a change in y



$$\Theta = \text{angle} = \boxed{\frac{\text{Slope}}{\text{Gradient}}}$$

$$\text{Slope} = \frac{Y}{X} = \frac{\Delta Y}{\Delta X} = \frac{Y_2 - Y_1}{X_2 - X_1}$$

$\Delta = \text{delta} = \text{change} =$

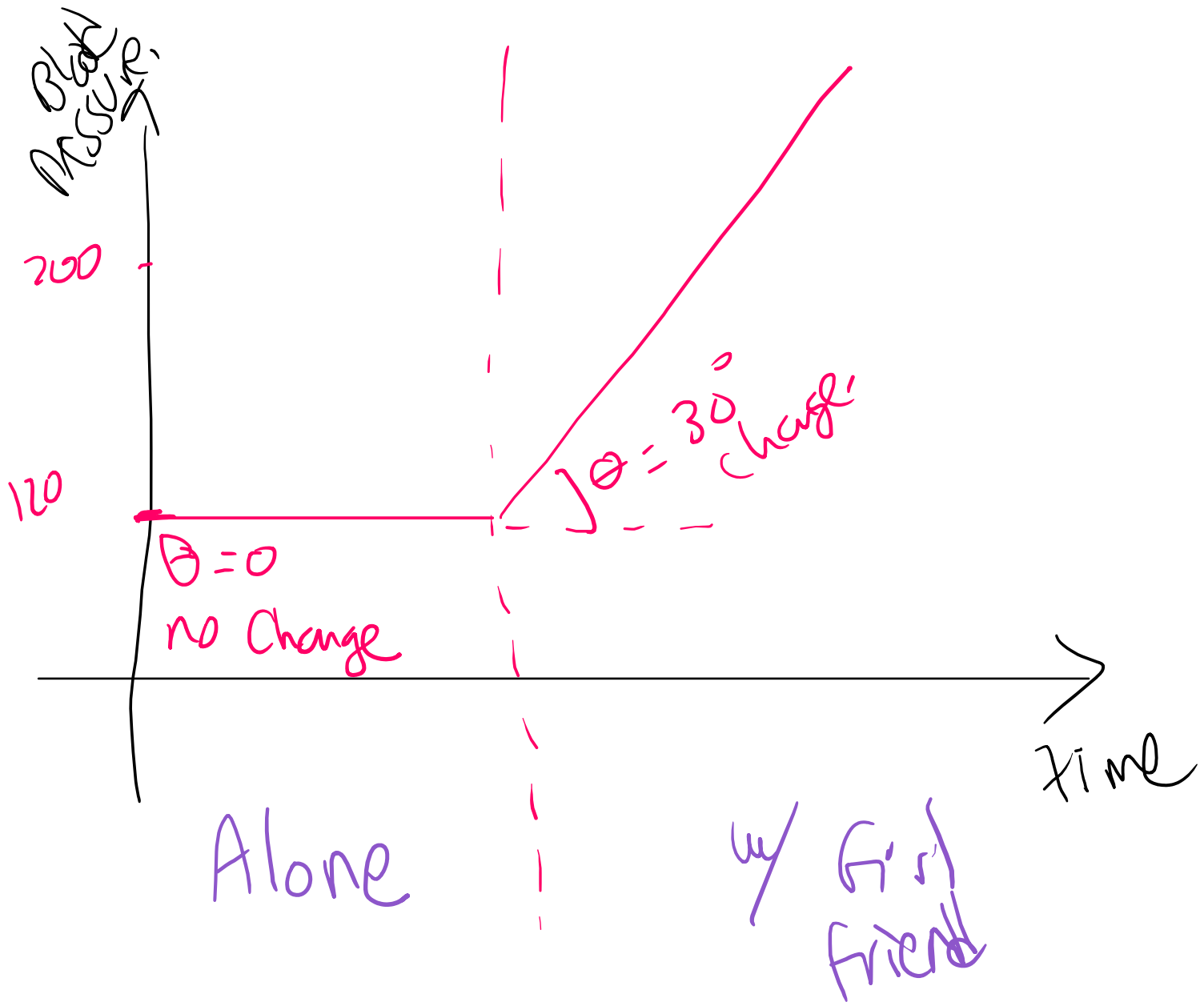
$$\text{time 1} = 3:00$$

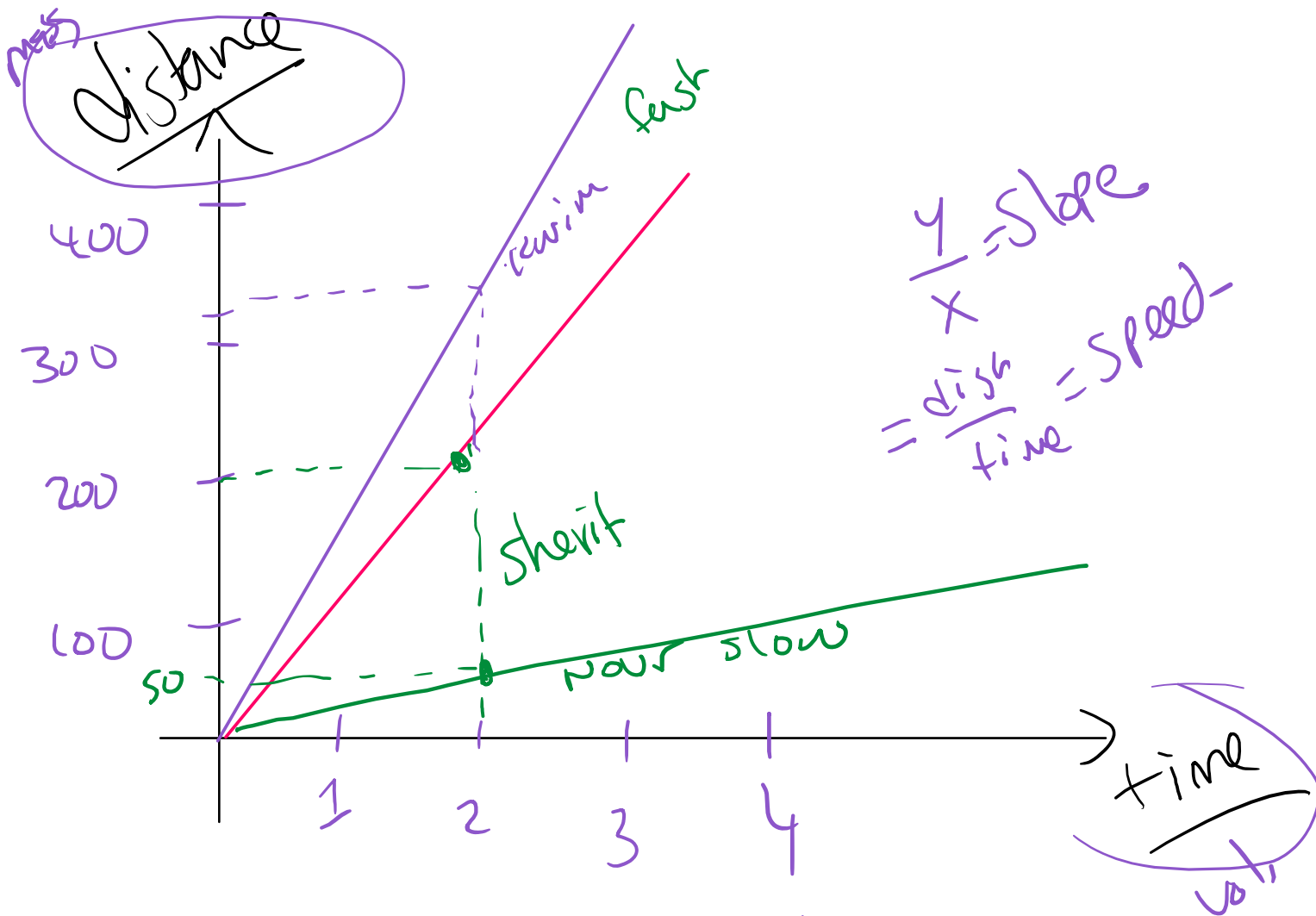
$$\text{time 2} = 3:02$$

$$\text{change} = \text{new} - \text{old}$$

$$\Delta = \text{change}$$

$$\Delta \text{ Sherif} = \text{new Sherif} - \text{old Sherif}$$





Speed = rate of distance

$$= \frac{\text{distance}}{\text{time}}$$