

Example for Short-term Estimate, Arithmetic Growth Method:

- Assumption: $\frac{dP}{dt} = K_a = \text{constant growth rate}$

- Equation 1.2:

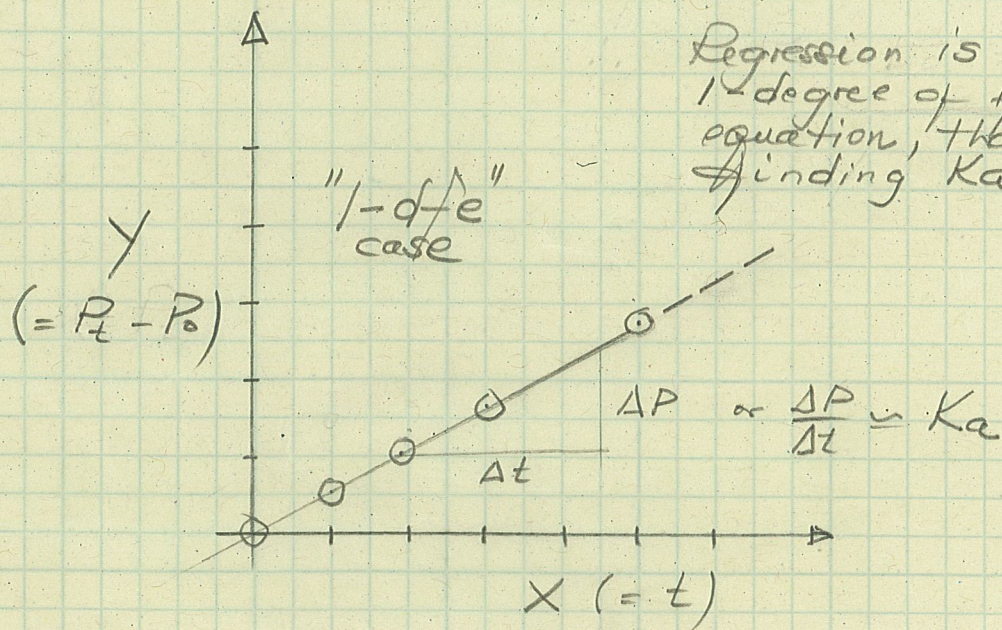
$$P_t = K_a t + P_0$$

$$Y = MX + N$$

a) If $P_0 = \text{unknown}$: Regression is for a 2-degree of freedom equation, that is finding K_a & P_0

b) If $P_0 = \text{known}$: $P_t - P_0 = K_a t$

$$Y = MX$$



Determine the "coefficient of determination" or R-Squared, R^2 , to define the goodness of fit.

$$0 \leq R^2 \leq 1$$

no fit. ←

→ perfect fit of data to a line