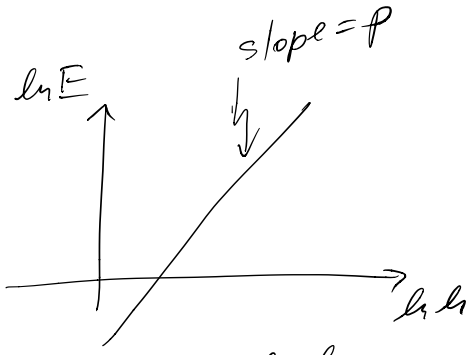
$$\int_a^b f(x)\,dx = T(h) + \underbrace{Ch^p}_{\text{error } E}$$



$$E = Ch^p$$

$$\ln E = \ln C + p \ln h$$

Assume that $C \approx 1 \Rightarrow \ln E \sim p \ln h$

$$\Rightarrow p \approx \frac{\ln E}{\ln h}$$

Note compute $\int_a^b f(x)dx$ w/ different values of h. Plot $\ln E$ vs. $\ln h$. The slope of the line is p.

OR

For different h, find ratios $\frac{\ln E}{\ln h}$, which will approximate order p.