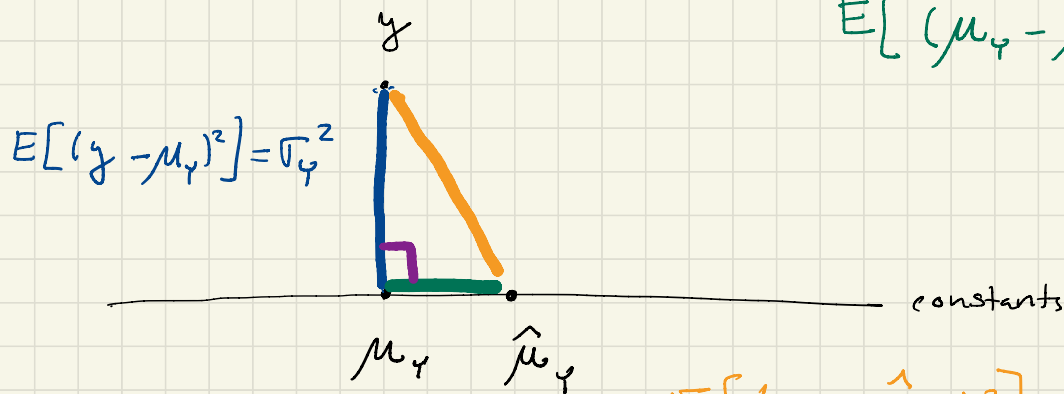


$$E[(y - \hat{\mu}_y)^2] = (1 + \frac{1}{n}) \sigma_y^2$$

$$E[(\mu_y - \hat{\mu}_y)^2] = \frac{\sigma_y^2}{n}$$



$$E[(y - \hat{\mu}_y)^2] = \frac{\sigma_y^2}{n} + \sigma_y^2$$

$$E[(y - \mu_y)(\mu_y - \hat{\mu}_y)] = 0$$

↑  
R.V. b/c a function of  
R.V.'s