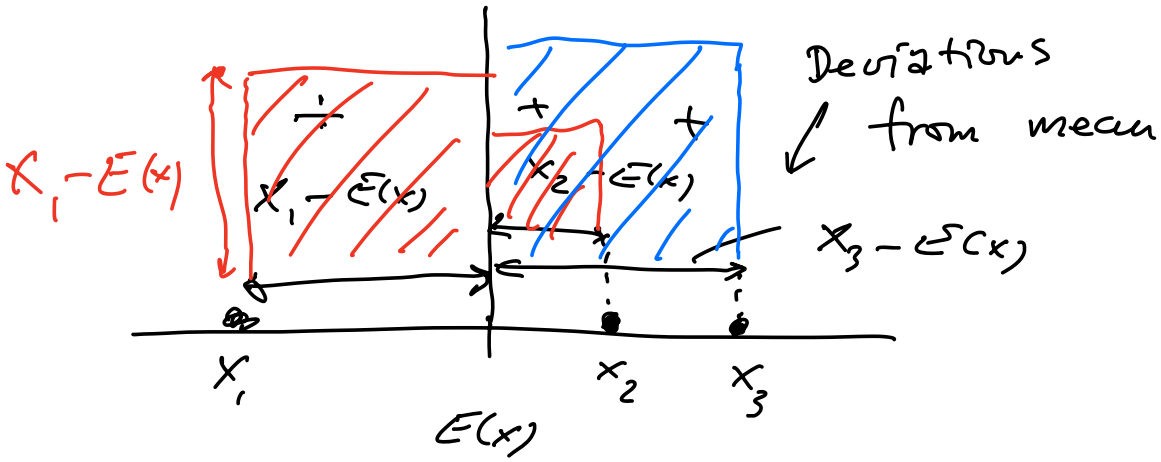


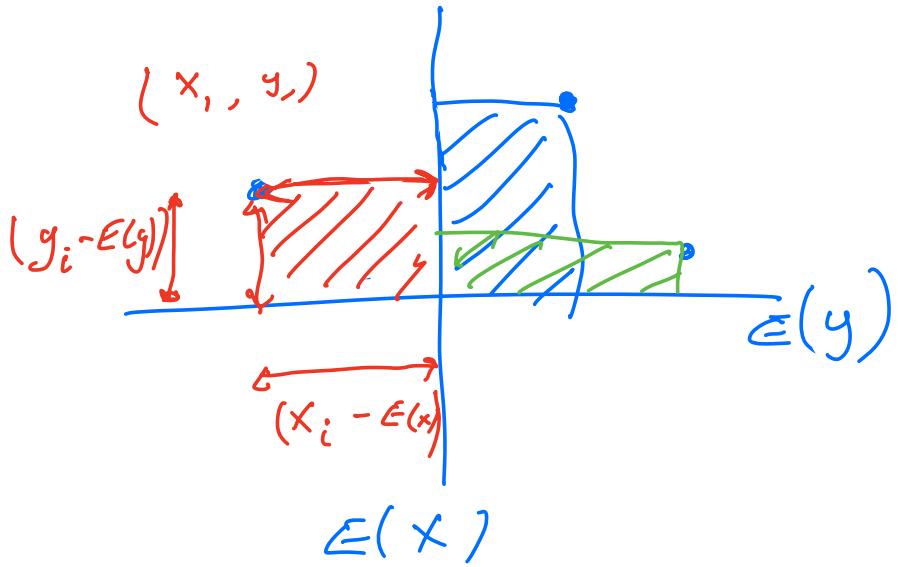
$$E(X - \mu_X)^2 \neq 0$$

$E(x) = cm$ $\quad$ $Var(x) = cm^2$

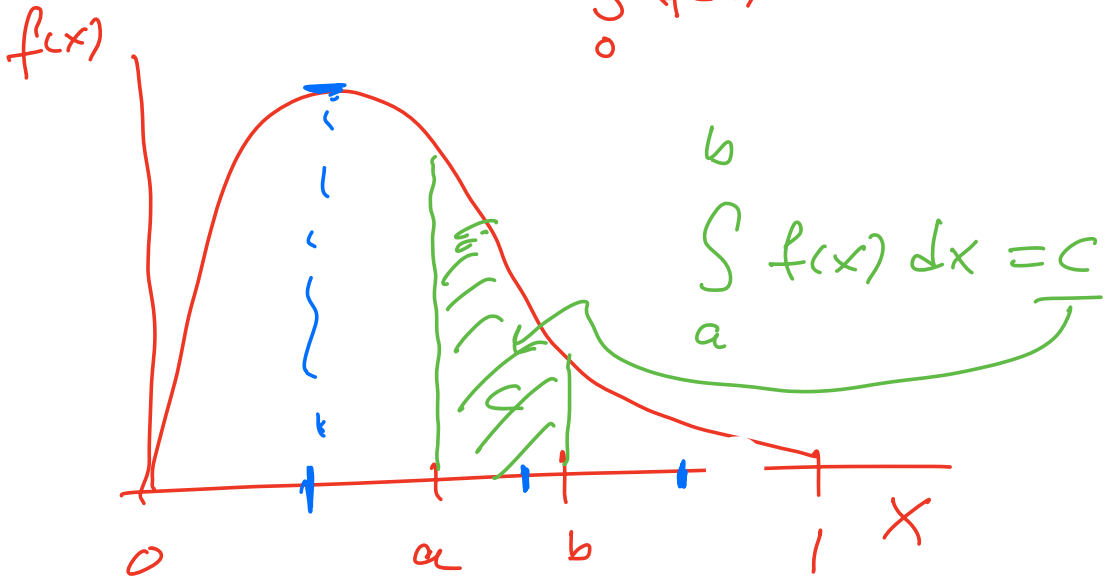
$$Stdev(x) = \sqrt{Var(x)} = cm$$

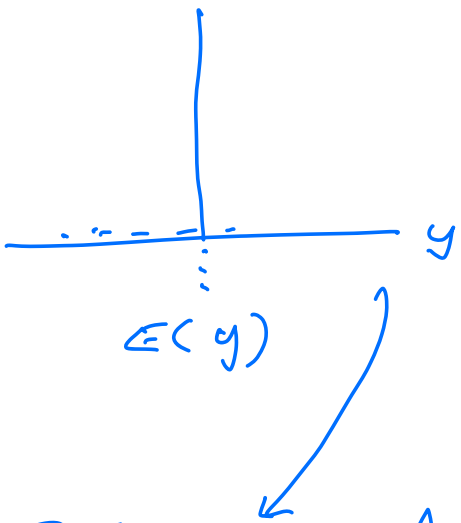
average dev. from mean

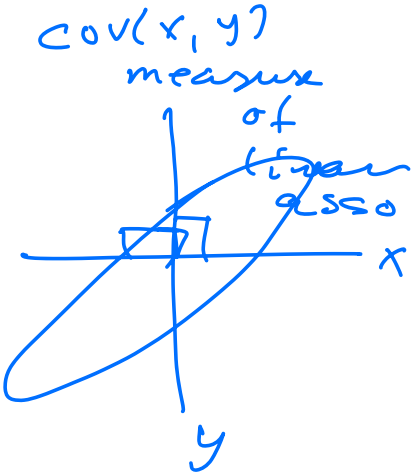
$$Cov(x,y) = E(x_i - E(x))(y - E(y))$$



$$\int_0^1 f(x)\,dx = 1$$



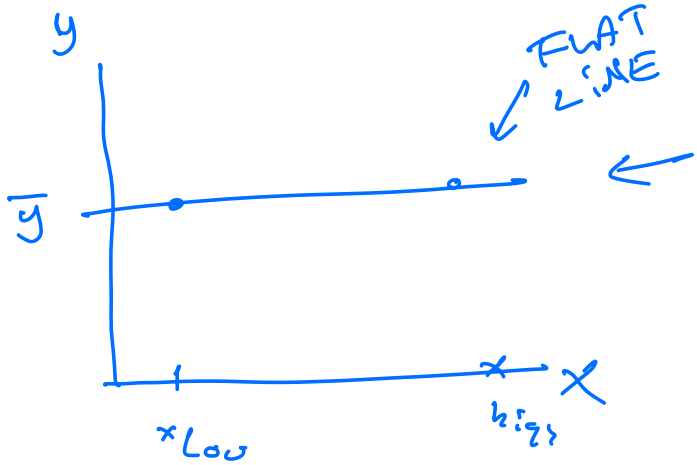




90° FLIPPING y AXIS

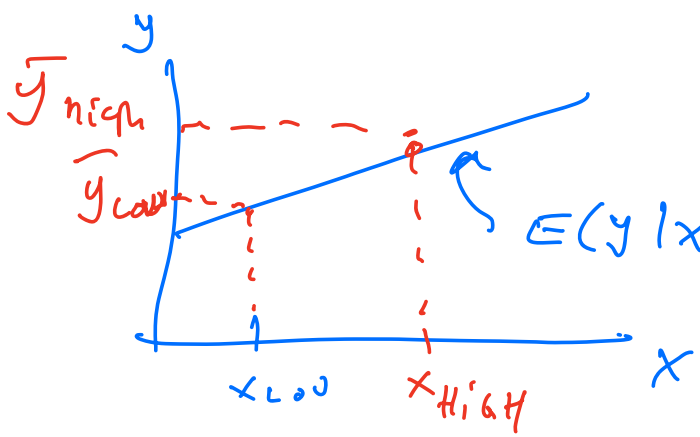
$cov(x,y) > 0$

$\rho_{x,y} > 0$



$cov(x,y) = 0$

$\rho_{x,y} = 0$



$cov(x,y) > 0$

$\rho_{x,y} > 0$