

Problem 3.61

A r.v. X has $\langle X \rangle = 2$, $\langle X^2 \rangle = 8$. Find $\text{Var}(X)$ and σ_x .

$$\text{Var}(X) = \langle X^2 \rangle - \langle X \rangle^2 = 8 - 4 = 4$$

$$\sigma_x = \sqrt{4} = 2$$