

ex 7.3

$$E[X] = 2 \quad \text{Var}(X) = 3$$

$$E[X^2] = ?$$

Solution

$$\text{Var}(X) = E[X^2] - [E(X)]^2 \quad \text{--- (A)}$$

so

$$3 - E(X^2) = \text{Var}(X) + [E(X)]^2$$

$$\Rightarrow E[X^2] = (2)^2 + 3$$

$$\boxed{E[X^2] = 7} \quad \text{Ans}$$

ex 7.7