

100. Solution: B

Note

$$P(X = 0) = 1/6$$

$$P(X = 1) = 1/12 + 1/6 = 3/12$$

$$P(X = 2) = 1/12 + 1/3 + 1/6 = 7/12 .$$

$$E[X] = (0)(1/6) + (1)(3/12) + (2)(7/12) = 17/12$$

$$E[X^2] = (0)^2(1/6) + (1)^2(3/12) + (2)^2(7/12) = 31/12$$

$$\text{Var}[X] = 31/12 - (17/12)^2 = 0.58 .$$