

Probability Assignment 1(12.13.4.11)

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Question

Two dice are thrown simultaneously, if X denotes number of sixes, find the expectation of X

Solution

Clearly X follows a binomial distribution

$$X \sim \text{Bin}(2, 1/6) \quad (1)$$

$$E(X) = np \quad (2)$$

$$= 2 \cdot \frac{1}{6} \quad (3)$$

$$= 0.33 \quad (4)$$

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