

QUESTION

A discrete random variable can take the values 1, 2 and 3 with probabilities $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{4}$ respectively. Obtain the mean.

ANSWER

$$\text{Mean} = \frac{1}{2}(1) + \frac{1}{4}(2) + \frac{1}{4}(3) = \frac{1}{2} + \frac{1}{2} + \frac{3}{4} = \frac{7}{4}$$