

Jannajunnaru Meem

203 - 11 - 6590

Answer to question 3

x_i	P_{x_i}	$x_i P(x_i)$	$(\mu - x_i)^2$	$P_{x_i} (\mu - x_i)$
5	.1	.5	90.25	9.025
10	.3	3	20.25	6.075
15	.2	3	.25	.05
20	.4	8	30.25	12.1
		$\mu = 14.5$	141	$\sigma^2 = 27.25$

$$\begin{aligned} \sigma^2 &= 27.25 \\ &= \sqrt{27.25} \\ &= 5.220 \end{aligned}$$

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x_i	P_{x_i}	$x_i P(x_i)$	$(\mu - x_i)^2$	$P_{x_i} (\mu - x_i)$
1,000	.6	600	12100	7200
1200	.3	360	8100	2430
1500	.1	150	152100	15210
		$N = 1110$	172300	$\sigma^2 = 24900$

$$\sigma = \sqrt{24900} = 157.79$$

Answer to question 07

x_i	P_{x_i}	$x_i P_{x_i}$	$(\mu - x_i)^2$	$P_{x_i} (\mu - x_i)$
10	.50	5	121	60.5
25	.40	10	16	6.4
50	.08	4	841	67.28
100	.02	2	6241	124.82
		$N = 21$	7219	$\sigma^2 = 259$
				$\sigma = \sqrt{259}$ $= 16.09$