41-4	$\omega$	X(ω)	PEW3	X2(W) PEW3		
	1	1	1/6	1/6		
	2	24	116	4/6		
FAIR	3	9	116	9/6		
DIE	4	16	1/6	16/6		
	5	25	1/6	25/6		
	6	36	116	36/6		
	Ex2= 91/6 = 2 15.1667					

	W	x²(ω)	I PEW3	X2(ω) P{ω}
	1	1	1/12	1/12
UNFAIR	2	4	1/12	4/12
DIE	3	9	1/12	9/12
	4	16	3/12	48/12
	5	25	3/12	75/12
	6	36	3/12	108/12
			E	x2=245/12 220.4167

$$\int_{1}^{4} \frac{13}{x} \int_{1}^{3} f(x) = P \{S_3 = x\} = \left(\frac{3}{x}\right) p^{x} (1-p)^{x}$$

$$\chi=0 \Rightarrow f_{s_3}(0) = \begin{pmatrix} 3 \\ 0 \end{pmatrix} \begin{pmatrix} 2 \\ 3 \end{pmatrix}^0 \begin{pmatrix} 1 \\ 3 \end{pmatrix}^3 \Rightarrow 1 \cdot 1 \cdot 1 = \boxed{1}$$

$$\mathcal{H} = 1 \Rightarrow f_{S_3}(1) = \begin{pmatrix} 3 \\ 1 \end{pmatrix} \begin{pmatrix} 2 \\ 3 \end{pmatrix} \begin{pmatrix} 1 \\ 3 \end{pmatrix}^2 \Rightarrow 3 \cdot 2 \cdot 1 \Rightarrow 6$$

$$2\lambda = \lambda \Rightarrow f_{S_3}(\lambda) = \begin{pmatrix} 3 \\ 2 \end{pmatrix} \begin{pmatrix} 2 \\ 3 \end{pmatrix}^2 \begin{pmatrix} 1 \\ 3 \end{pmatrix}^2 \Rightarrow 3 \cdot 4 \cdot 1 \Rightarrow 12$$

$$\lambda = 3 \Rightarrow f_{S_3}(3) = \begin{pmatrix} 3 \\ 3 \end{pmatrix} \begin{pmatrix} 2 \end{pmatrix}^{4} \begin{pmatrix} 1 \\ 3 \end{pmatrix} = 1 \cdot 8 \cdot 1 \Rightarrow \begin{vmatrix} 8 \\ 27 \end{vmatrix}$$

$$= 0 \cdot 1 + 1 \cdot 6 + 2 \cdot 12 + 3 \cdot 8 = 54 = 2$$

$$27 \quad 27 \quad 27 \quad 27 \quad 27 \quad 27$$

