10-05-2019

X \ Y	1	2	3	4	5	6	
1	0.0360	0.0500	0.0320	0.0480	0.0260	0.0080	0.2
2	0.0288	0.0400	0.0256	0.03840	0.0208	0.0064	0.16
3	0.0144	0.0200	0.0128	0.01920	0.0104	0.0032	0.08
4	0.0522	0.0725	0.0464	0.06960	0.0377	0.0116	0.29
5	0.0288	0.0400	0.0256	0.03840	0.0208	0.0064	0.16
6	0.0198	0.0275	0.0176	0.02640	0.0143	0.0044	0.11
	0.18	0.25	0.16	0.24	0.13	0.04	

1) PRIMO DADO ESCE UN NUMERO PARI

$0.16 + 0.29 + 0.11 = 0.56$ ✓

2) SECONDO DADO NON ESCANO 1 o 4

$0.25 + 0.16 + 0.13 + 0.04 = 0.58$ ✓

3) PROBABILITA' CONDIZIONATA $P_{X|4}(x|y=1)$ DETERMINARE $P(X \geq 3)$

$(0.01440 + 0.05220 + 0.02880 + 0.01980)/0.18 = 0.64$ ✓

4) VALORE ATTESO CONDIZIONATO $E[X|Y=4]$

$$\frac{1 \cdot 0.0480}{0.24} + \frac{2 \cdot 0.0384}{0.24} + \frac{3 \cdot 0.192}{0.24} + \frac{4 \cdot 0.06960}{0.24} + \frac{5 \cdot 0.03360}{0.24}$$

$$+ \frac{6 \cdot 0.02640}{0.24} = 3.38$$ ✓

5) VARIANZA CONDIZIONATA $VAR[Y|X=3]$

$VAR[Y|X=3] = E[Y^2|X=3] - E[Y|X=3]^2$

$E[Y^2|X=3] = 11.15$

$E[Y|X=3] = 3.01$

$VAR[Y|X=3] = 11.15 - (3.01)^2 = 2.0899$ ✓