

09-05-2019

	-3.98	-3.35	-0.29	0.16	
-3.78	6k	3k	1k	7k	0.3461537
-1.64	5k	9k	10k	12k	0.4615383
1.72	4k	1k	2k	8k	0.1923076
	0.1923076	0.1666665	0.2948716	0.3461536	

1) TROVARE K

$$\frac{1}{27+36+15} = 0.01282051 \approx$$

2) DISTRIBUZIONE MARGINALE DI X. DETERMINARE $P(X \leq -3.78)$

$$P(X \leq -3.78) = 0.3461537 \approx$$

3) DISTRIBUZIONE MARGINALE DI Y. DETERMINARE $P(Y > -3.98)$

$$P(Y > -3.98) = 0.166665 + 0.2948716 + 0.3461536$$

$$= 0.8076982 \approx$$

4) VALORE ATTESO CONDIZIONATO $E(X|Y = -3.35)$

$$\frac{-3.78 \cdot (3 \cdot 0.01282051)}{0.166665} + \frac{(-1.64) \cdot (9 \cdot 0.01282051)}{0.166665} + \frac{1.72 \cdot (0.01282051)}{0.166665}$$

$$= ~~-1.875385~~ -1.875385 \approx$$

5) ~~VAR~~ VARIANZA CONDIZIONATA $VAR(Y|X = -3.78)$

$$VAR(Y|X = -3.78) = E(Y^2|X = -3.78) - E(Y|X = -3.78)^2$$

$$E(Y^2|X = -3.78) = ~~4.807934~~ 4.807934$$

$$E(Y|X = -3.78) = ~~-1.333334~~ -1.333334$$

$$VAR(Y|X = -3.78) = ~~3.030154~~ 3.030154 \approx$$