9. Given data from two distributions, find the distance between the distributions.

Euclidean distance

Euclidean distance is the distance between two real distinct value .It is calculate by the square root of the sum of the squared difference elements in two vectors.

$$\text{Euclidean Distance} = |X - Y| = \sqrt{\sum_{i=1}^{i=n} (x_i - y_i)^2}$$

X: Array or vector X

Y: Array or vector Y

x_i: Values of horizontal axis in the coordinate plane

y_i: Values of vertical axis in the coordinate plane

n: Number of observations

how to implement in excel

= SORT(SUM X MYZ(array_X,array_Y))

Trials	Binomial Distribution	Poisson Distribution		distance			
1	0.08957952	0.268128018		0.178548	n	0.4	
2	0.20901888	0.053625604		0.155393	k	8	
3	0.27869184	0.00715008		0.271542	λ	0.4	
4	0.2322432	0.000715008		0.231528			
5	0.12386304	5.72006E-05		0.123806			
6	0.04128768	3.81338E-06		0.041284			
7	0.00786432	2.17907E-07		0.007864			
8	0.00065536	1.08954E-08		0.000655			