

Miscellaneous problems on Correlation

1. $Cov(x,y) = 10$, $\sigma_x=4$, $\sigma_y=3$. Find out Correlation coefficient.
2. From the following data, find the correlation coefficient between X & Y series.

Particulars	X	Y
Total Numbers of Observation	15	15
Arithmetic mean	25	18
Standard Deviation	3.01	3.03
Sum of squares of deviation from mean	135	138
Sum of product of deviation	122	

3. From the following data, find the correlation coefficient between X & Y series.

Particulars	X	Y
Total Numbers of Observation	10	10
Arithmetic mean	14.6	12.7
Sum of squares of deviation from mean	115.96	59.04
Sum of product of deviation	53.95	

4. From the following data, find the correlation coefficient between X & Y series.

Particulars	X	Y
Total Numbers of Observation	15	15
Standard Deviation	10	12
Sum of product of deviation	122	

5. From the following data, find the correlation coefficient between X & Y series.

Particulars	X	Y
Total Numbers of Observation	7	7
Standard Deviation	2.76	2.05
Sum of product of deviation	138	

6. From the following data, find the correlation coefficient between X & Y series.

Particulars	X	Y
Total Numbers of Observation	9	9
Standard Deviation	9.07	11.85
Arithmetic Mean	70.5	121.5
Assumed Mean	65	108
Sum of product of deviation	1451	

7. From the following data, find the correlation coefficient between X & Y series.

Particulars	X	Y
Total Numbers of Observation	10	10
Standard Deviation	13.17	15.75
Arithmetic Mean	75.5	126.5
Assumed Mean	69	113
Sum of product of deviation	2176	

8. From the following data, find the correlation coefficient between X & Y series.

Particulars	X	Y
Total Numbers of Observation	8	8
Standard Deviation	13.07	16
Arithmetic Mean	16	20.6
Assumed Mean	18	20
Sum of product of deviation	220	
