

## Lab #7: Correlation

- 1) You have collected the following data on Music Quiz Scores (X) and Math Quiz Scores (Y). You are interested in studying the relationship between musical ability and mathematical ability. Compute the appropriate correlation coefficient for the data. Describe the relationship between the two variables.

Student	Music (X)	Math (Y)
A	10	11
B	13	9
C	18	17
D	12	15
E	17	14

- 2) You are interested in studying the relationship between Basket Ball (BB) players' skills and their Intelligent Quotient (IQ) Scores. You test four players for general basketball skills. You then rank them 1=most skills, 4=lowest skills. Determine the correlation between the two variables and describe their relationship.

Subject	BB Skills	IQ
A	1	50
B	3	82
C	2	65
D	4	78

- 3) Define and differentiate between positive, negative, and no correlation.
- 4) When is it appropriate to use Pearson's R? Spearman's Rho?