Statistics & Probability | 4ᵗʰ Quarter
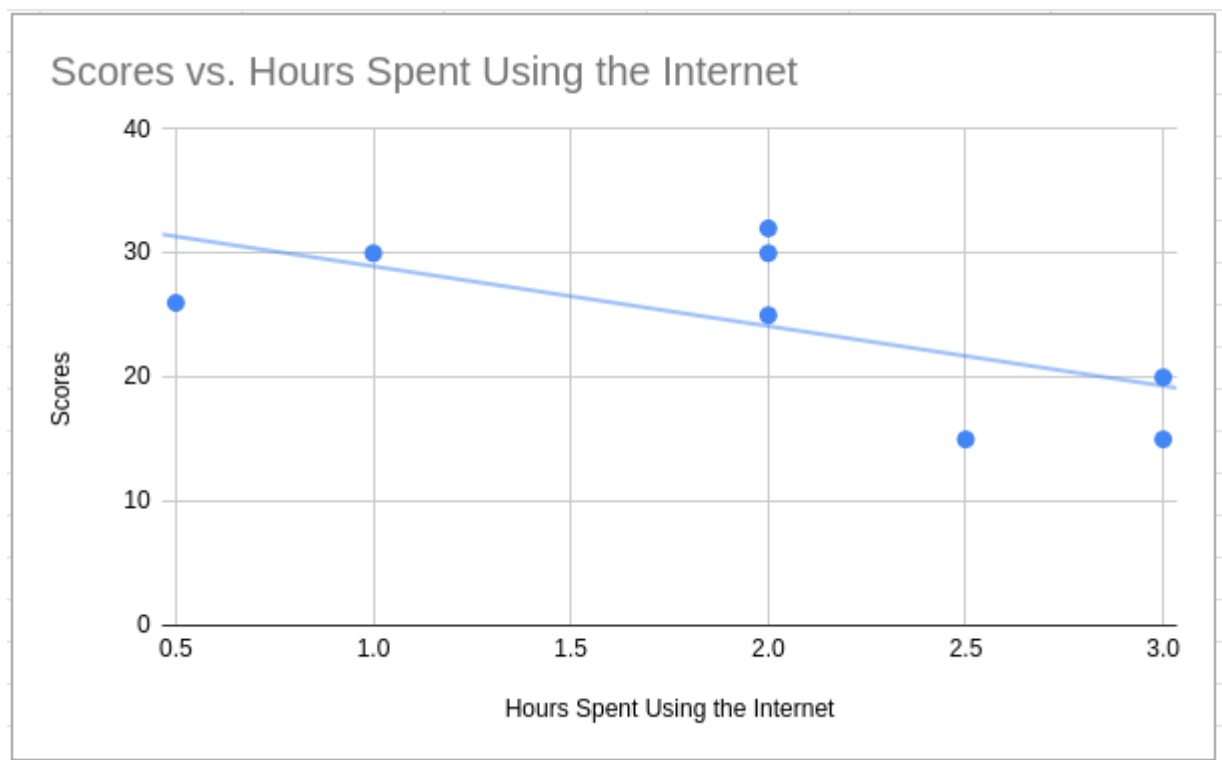# MPT 1: Scatter Plots
April 6 2021

Instructions:
   a. Identify the independent variable and dependent variable.
   b. Construct a scatter plot.
   c. Determine the direction of the straight line that the data points seem to follow.
   d. Determine the strength of correlation between the two variables.

1. The table shows the number of hours spent by 8 students in using the Internet and their scores on a Mathematics test.

Student	Hours Using the Internet	Scores
1	1	30
2	2	25
3	3	20
4	2	30
5	0.5	26
6	2.5	15
7	2	32
8	3	15

Independent Variable: Hours Using The Internet
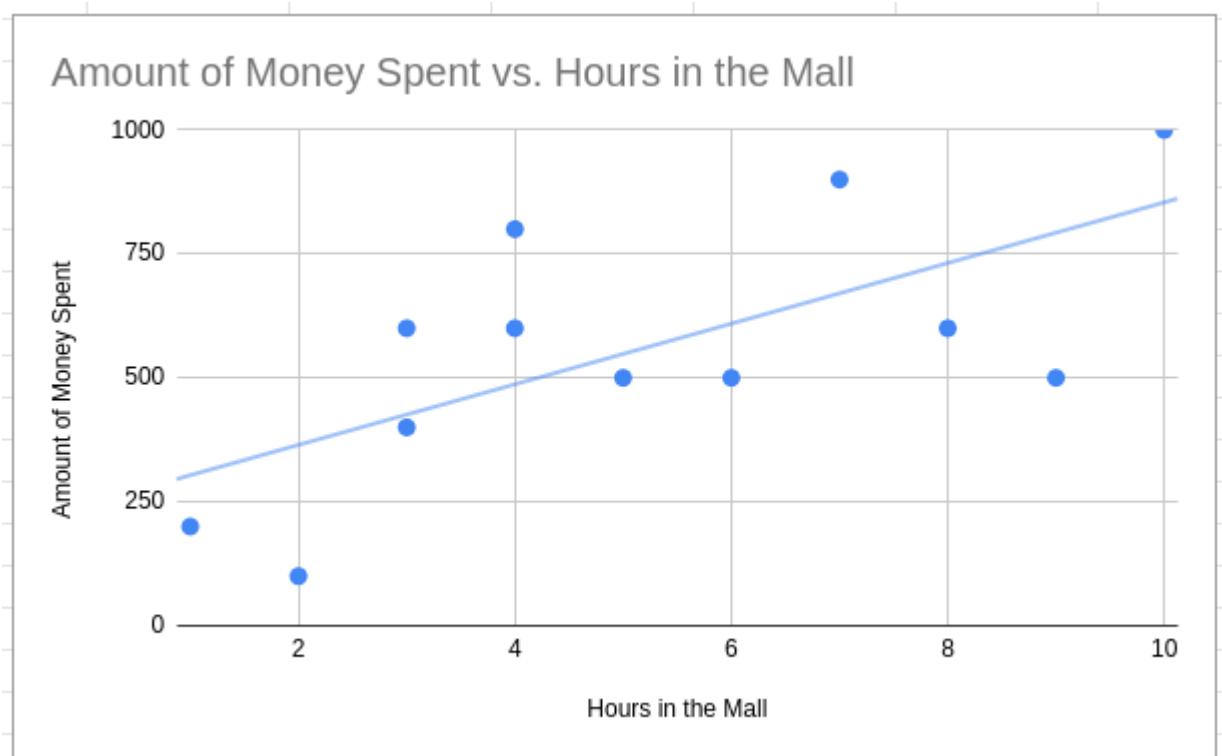**Dependent Variable**: Scores

Moderate Negative Correlation.

2. The table shows the number of hours spent in the mall by 12 persons and the amount of money they spent when they go to the mall.

Person	Hours in the Mall	Amount of Money Spent (SAR)
1	8	600
2	10	1000
3	9	500
4	3	600
5	1	200
6	7	900
7	6	500
8	4	800
9	5	500
10	2	100
11	3	400
12	4	600

Independent Variable: Hours in the Mall
Dependent Variable: Amount of Money Spent

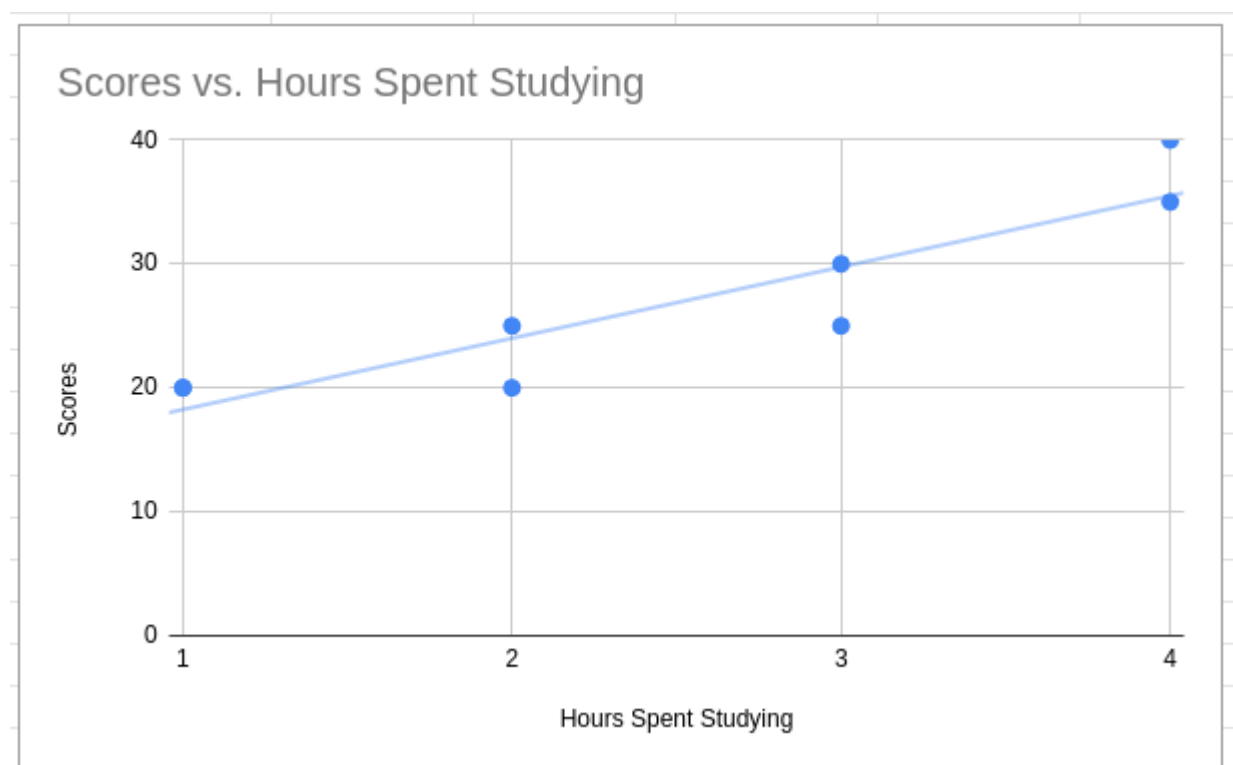**Weak/Moderate Positive Correlation.**

3. Shown in the table below are the number of hours spent by 8 students in studying and their scores in a Mathematics test.

Student	Hours Spent Studying	Scores

1	4	40
2	2	25
3	1	20
4	3	30
5	2	20
6	3	25
7	1	20
8	4	35

Independent Variable: Hours Spent Studying
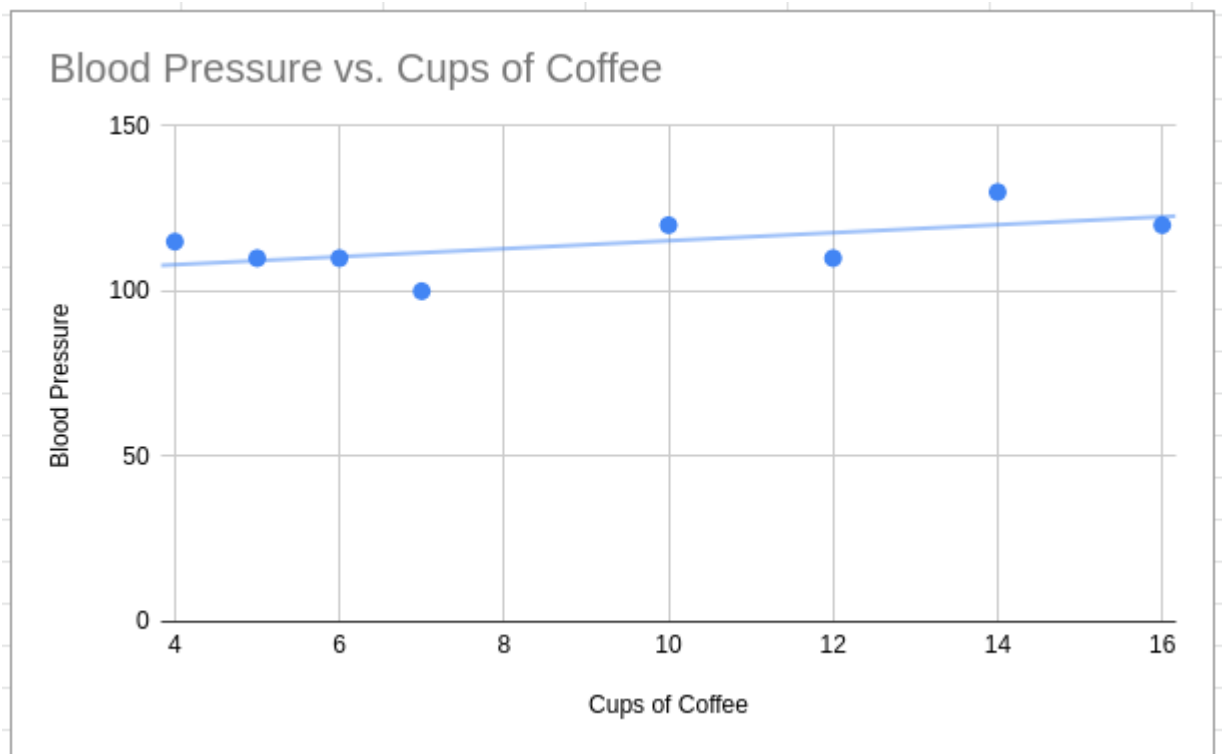**Dependent Variable**: Scores

Strong Positive Correlation.

4. The table shows the number of cups of coffee that 8 persons had in one week and their systolic blood pressure numbers after one week.

Person	Number of Cups of Coffee	Systolic Blood Pressure Number
1	5	110
2	4	115
3	7	100
4	10	120
5	14	130
6	6	110

7	12	110
8	16	120

Independent Variable: Number of Cups of Coffee
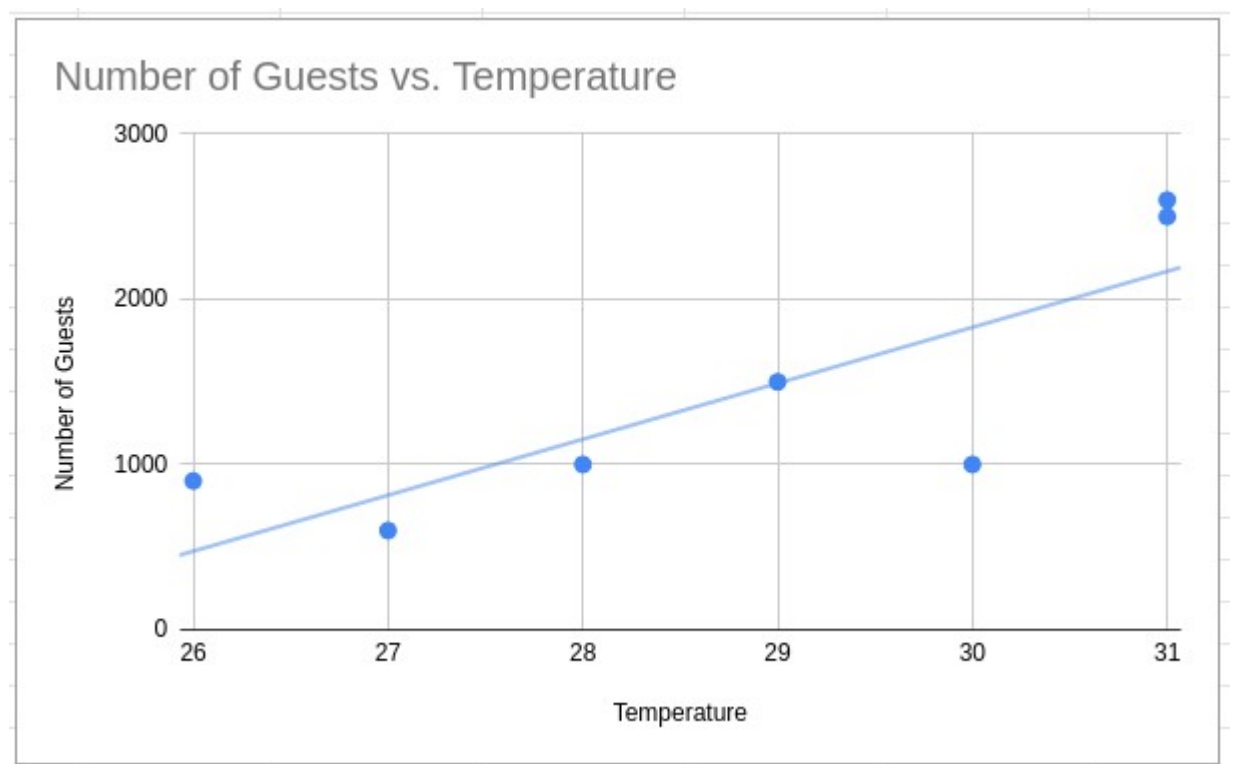**Dependent Variable**: Systolic Blood Pressure Number

Strong Positive Correlation.

5. Rosalinda de Castro has a private resort. She decided to record the temperature in one week and the number of guests who came to her resort for that week. The data are shown below.

Day	Temperature in C	Number of Guests
1	27	600
2	28	1000
3	29	1500
4	31	2500
5	26	900
6	30	1000
7	31	2600

Independent Variable: Temperature
Dependent Variable: Number of Guests

Number of Guests vs. Temperature

Moderate Positive Correlation.