1. There is a nasty rumor going around that watching NetFlix interferes with productivity! The folks at NetFlix have paid me a large some of money to evaluate this slander! The data below are from a sample of 25 College students. I monitored their computers to determine how many hours of NetFlix they watch on an average day, the values varied from 0-5 hours. I also recorded the number of classes they missed in the Spring 2017 semester as my measure of productivity.
2. Calculate the regression equation from the data collected (8 pts).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| X (NetFlix) | Y (Missed Class) | X2 | Y2 | x\*y |
| Σ = 75 | Σ = 125 | Σ = 279 | Σ = 685 | Σ = 339 |

 

 



1. Calculate the predicted number of classes skipped for someone who watches 9 hours of NetFlix per day. Is this value meaningful? (3 pts)

 This value is not meaningful because 8 was not in the range of values used to construct the regression equation.

1. If someone ‘ups their game’ by watching one additional hour of NetFlix per day how many more/fewer classes would we expect them to miss? (3 pts)

Because the slope is negative, we would expect them to miss 2/3 LESS of a class.

1. Calculate the correlation coefficient? Do the data support NetFlix’ claim that watching NetFlix does not interfere with productivity? (4 pts)

 Yes. b/c r is negative.

1. Please circle the scatterplot below that corresponds to this data set? (3 pts)