Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sect \_\_\_\_\_\_\_\_\_\_\_\_\_\_

The following table shows the amount of time students spend daily on their cellphones, and the amount of sleep they get nightly.

 Minutes on cellphone (x) Hours of sleep (y)

Charlie 60 8

Keith 90 6

Mick 15 11

Shana 30 10

Patty 45 8

Desiree 15 12

Penelope 90 5

Grover 75 7

Saul 45 9

Porta 15 10

Yan 75 8

Quazir 30 9

On a separate sheet of graph paper, create a scatter plot based on the above data.

Draw a line of best fit based on the scatter plot.

Does this scatter plot represent a positive, negative or no correlation?

Pick two points that are directly on the line of best fit and calculate the slope.

Use the slope you have found for the line of best fit, and calculate the y-intercept.

Using the slope and y-intercept, write an equation for the line of best fit.

A new student, Asaad, enrolls in school. He spends 135 minutes a day on his cellphone. Predict how many hours of sleep he averages nightly.