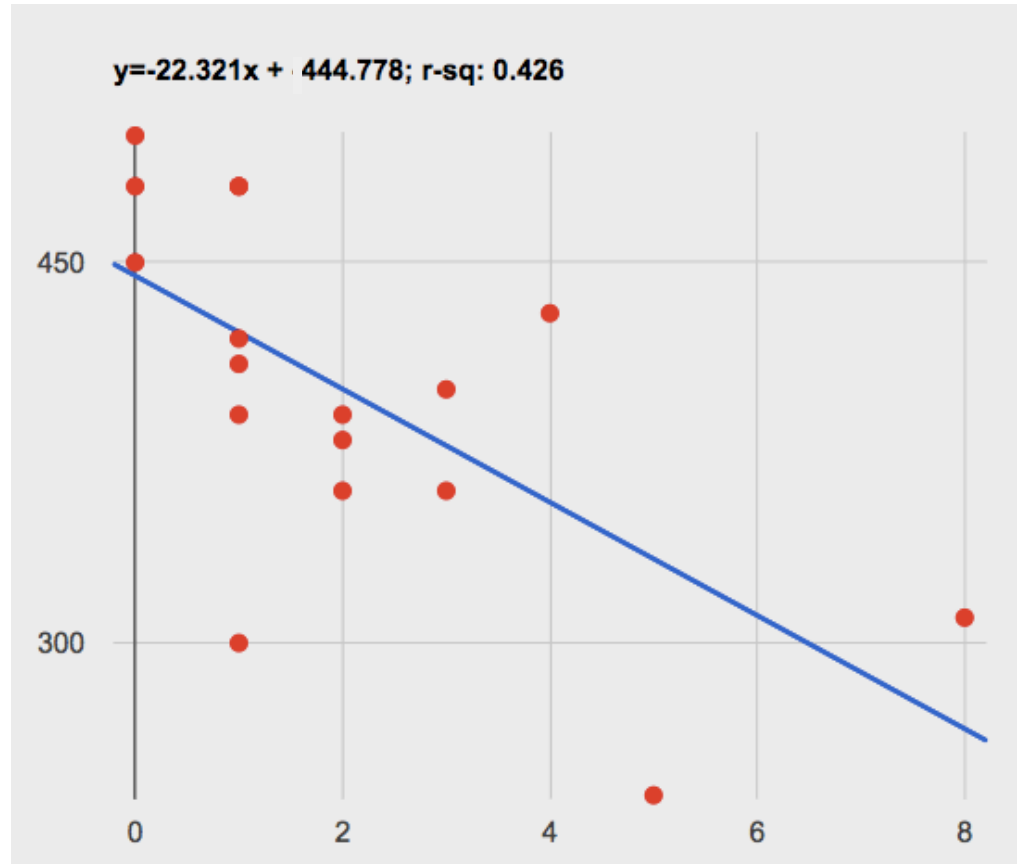


# Describing Relationships

Does drinking coffee impact one's amount of sleep? A group of people were surveyed about their coffee drinking and sleeping habits.

Daily cups of coffee	sleep (minutes)
3	400
0	480
8	310
1	300
1	390
2	360
1	410
0	500
2	390
1	480
3	360
4	430
0	450
5	240
1	420
2	380
1	480



Describe the relationship between coffee intake and minutes of sleep shown in the data above.

**There is a moderately strong negative relationship between cups of coffee and amount of sleep a person gets.**

**Based on the r-squared value, about 42% of the variation in sleep time can be explained by the amount of coffee consumed.**

**Based on the predictor function, we can predict that a person drinking 0 cups of coffee will get about 445 minutes of sleep per night.**