Unit 1 Discussion Example - Second Response to a Classmate's Post

Second Response to a Classmate's Post: Review a different classmate's post and the descriptive statistics summary table. Compare the variation in your variable with your classmate's variable using the coefficient of variation. Be sure to show how you calculated these two values. Discuss which variable has the most variation and why.

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I choose to compare Mileage and Fuel for UsedCars.xlsx. Here are the summary tables for the descriptive statistics:

Mileage		Fuel (MPG)	
Mean	66675.15333	Mean	23.60888889
Standard Error	2238.709839	Standard Error	0.236312139
Median	63914.5	Median	23
Mode	2222	Mode	22
Standard Deviation	47490.20725	Standard Deviation	5.012937481
Sample Variance	2255319784	Sample Variance	25.12954219
Kurtosis	0.625629859	Kurtosis	1.324826317
Skewness	0.730540773	Skewness	0.55765593
Range	284631	Range	41
Minimum	528	Minimum	2
Maximum	285159	Maximum	43
Sum	30003819	Sum	10624
Count	450	Count	450

To determine which variable has more variation, you can compare the coefficient of variations using the formula:

$$CV = \left(\frac{s}{\bar{x}}\right)100\%$$

Mileage CV = 47490.20725 / 66675.15333 *100% = 71.23%

Fuel CV = 5.012937481/ 23.60888889 * 100% = 21.23%

Mileage has more variation than Fuel consumption.