Alain Euksuzian (ID:40070126)

Quiz, Lesson 1: Introduction to Statistics

Your Score: 100%

Congratulations! Your score of 100% indicates that you've mastered the topics in this lesson. If you'd like, you can review the feedback for each question.

When you're ready to start the next lesson, exit this lesson and begin the next one.

Quiz, Lesson 2: Analysis of Variance (ANOVA)

Your Score: 100%

Congratulations! Your score of 100% indicates that you've mastered the topics in this lesson. If you'd like, you can review the feedback for each question.

Quiz, Lesson 3: Regression

Your Score: 100%

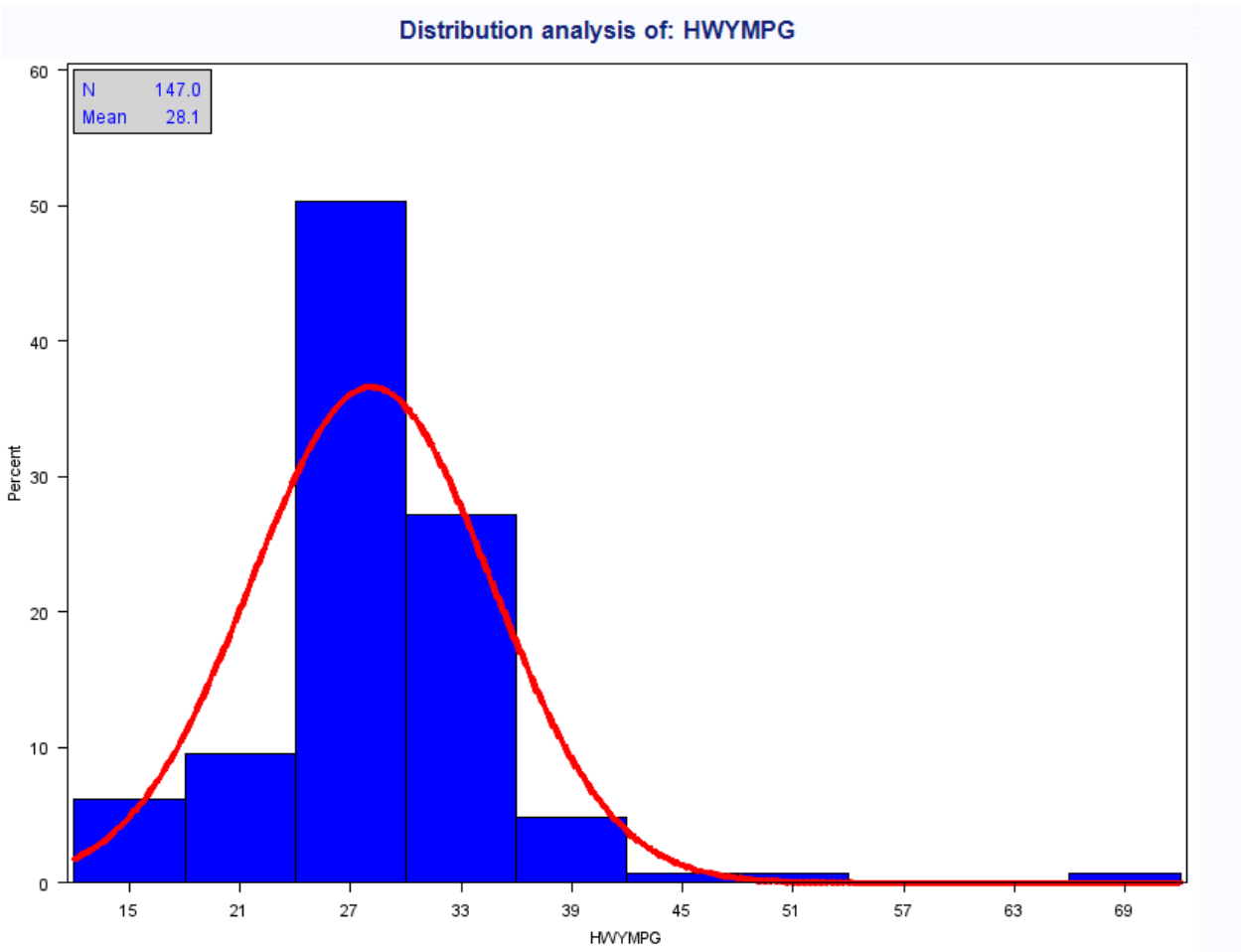
Congratulations! Your score of 100% indicates that you've mastered the topics in this lesson. If you'd like, you can review the feedback for each question.

When you're ready to start the next lesson, exit this lesson and begin the next one.

Part 2 (SAS file attached):

Descriptive Statistics For Cars2 Data

Analysis Variable : HWYMPG					
Mean	Std Dev	Range	Lower Quartile	Median	Upper Quartile
28.15	6.53	55.00	25.00	28.00	31.00



Distribution analysis of: HWYMPG

Fitted Normal Distribution for HWYMPG

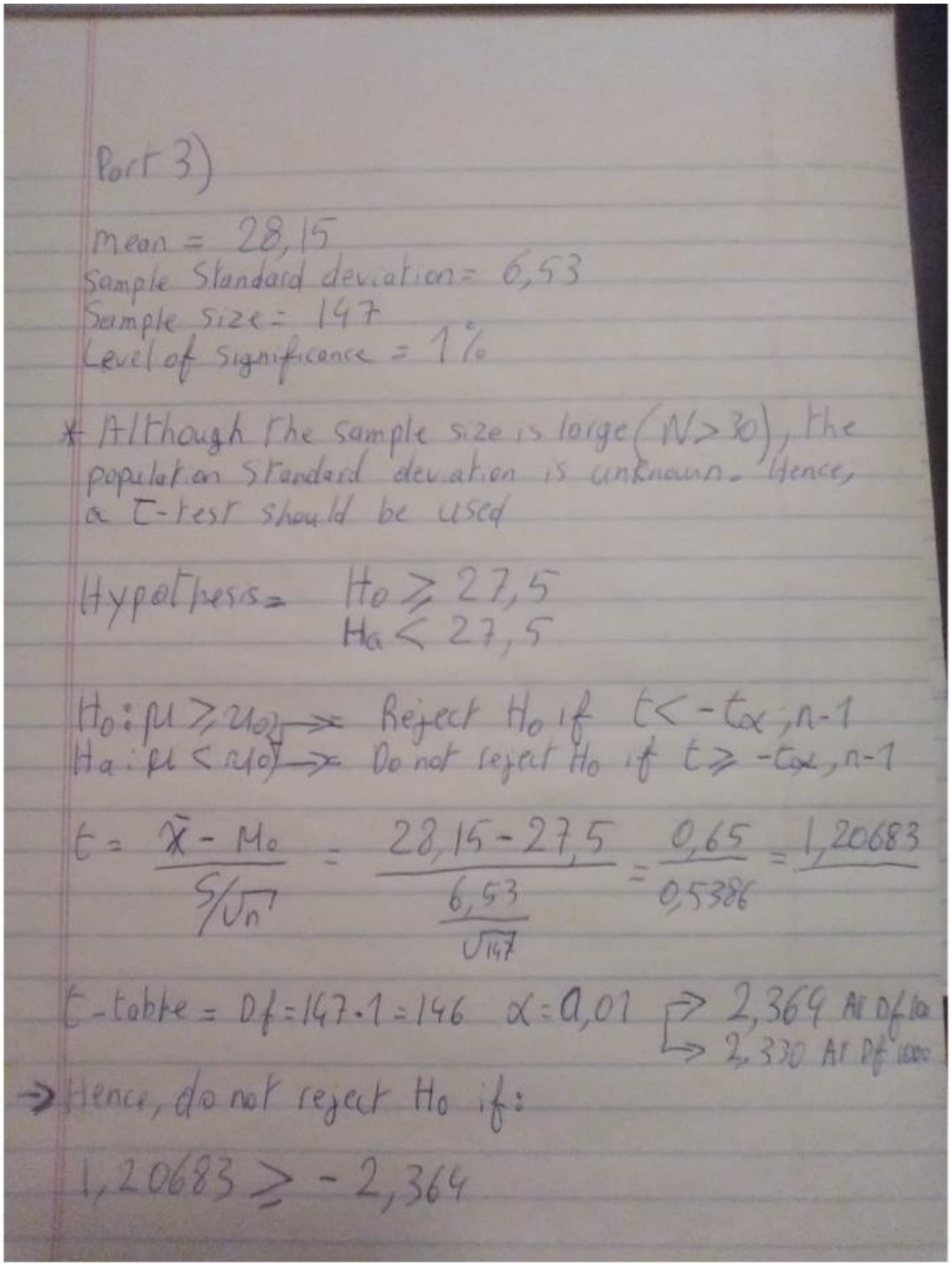
Parameters for Normal Distribution		
Parameter	Symbol	Estimate
Mean	Mu	28.14966
Std Dev	Sigma	6.533741

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.13369876	Pr > D	<0.010
Cramer-von Mises	W-Sq	0.58868315	Pr > W-Sq	<0.005
Anderson-Darling	A-Sq	3.43028040	Pr > A-Sq	<0.005

Quantiles for Normal Distribution		
	Quantile	
Percent	Observed	Estimated
1.0	15.0000	12.9499
5.0	17.0000	17.4026
10.0	21.0000	19.7763
25.0	25.0000	23.7427
50.0	28.0000	28.1497
75.0	31.0000	32.5566
90.0	33.0000	36.5230
95.0	38.0000	38.8967
99.0	51.0000	43.3494

Page Break

Part 3:



- H_o = The average fuel economy for cars is more than 27.5 miles per gallon (CAFÉ requirements met)
- H_a = The average fuel economy for cars is less than 27.5 miles per gallon (does not meet CAFÉ requirements)

Conclusion: At the t-score at df = 146 and confidence interval 1%: 1,20683 > -2,364. Hence, we do not have enough evidence to reject the null hypothesis. With the data provided the evidence is not strong

enough to reject the null hypothesis. Hence, with a 99% level of confidence we can assume the fuel economy for cars is more than or equal to 27.5 miles per gallon and the CAFÉ requirements are being met