

Report

Regression Equation

Stopping Distance = -137.16 + 5.146 Speed + 26.09 Driver Reaction Time

Coefficients

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	-137.16	4.31	-31.81	0.000	
Speed	5.146	0.100	51.30	0.000	2.88
Driver Reaction Time	26.09	2.77	9.41	0.000	2.88

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
5.20670	99.76%	99.74%	99.67%

Analysis of Variance

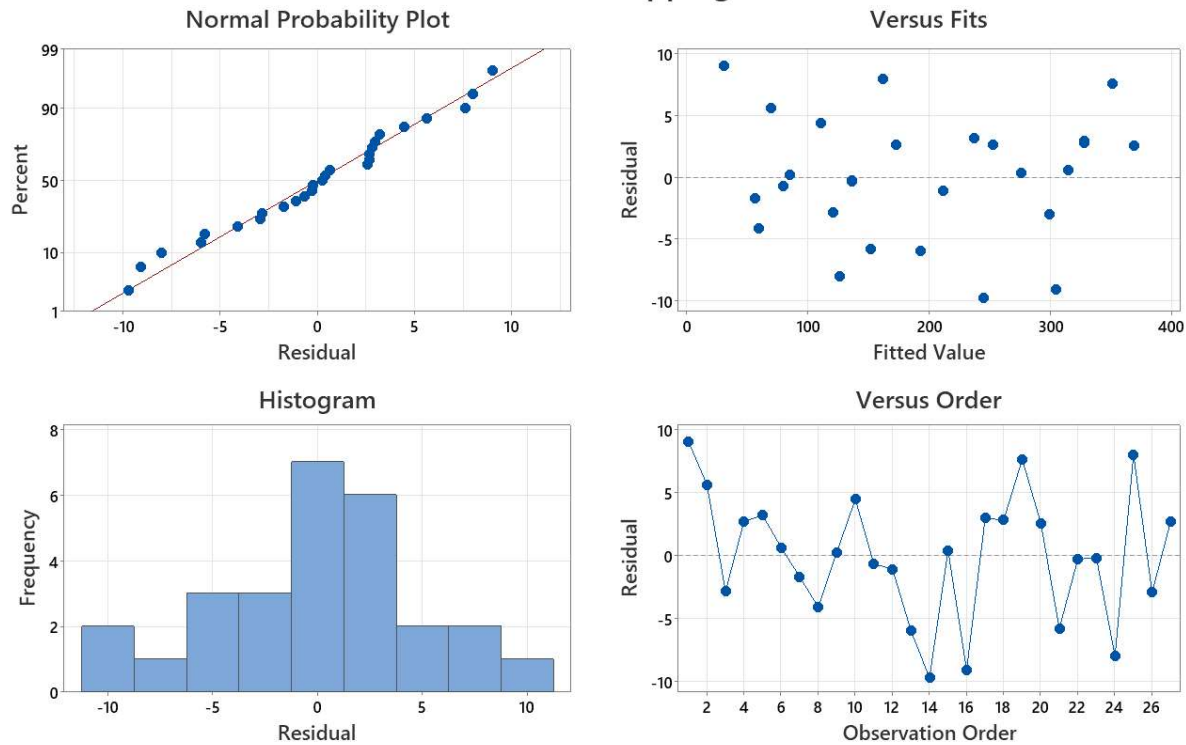
Source	DF	Adj SS	Adj MS	F-Value	P-Value
Regression	2	273696	136848	5047.92	0.000
Speed	1	71334	71334	2631.30	0.000
Driver Reaction Time	1	2400	2400	88.52	0.000
Error	24	651	27		
Total	26	274346			

Fits and Diagnostics for Unusual Observations

Stopping		Fit	Resid	Std Resid	
Obs	Distance				
1	40.00	30.99	9.01	2.19	R X

R Large residual
X Unusual X

Residual Plots for Stopping Distance



Regression Equation

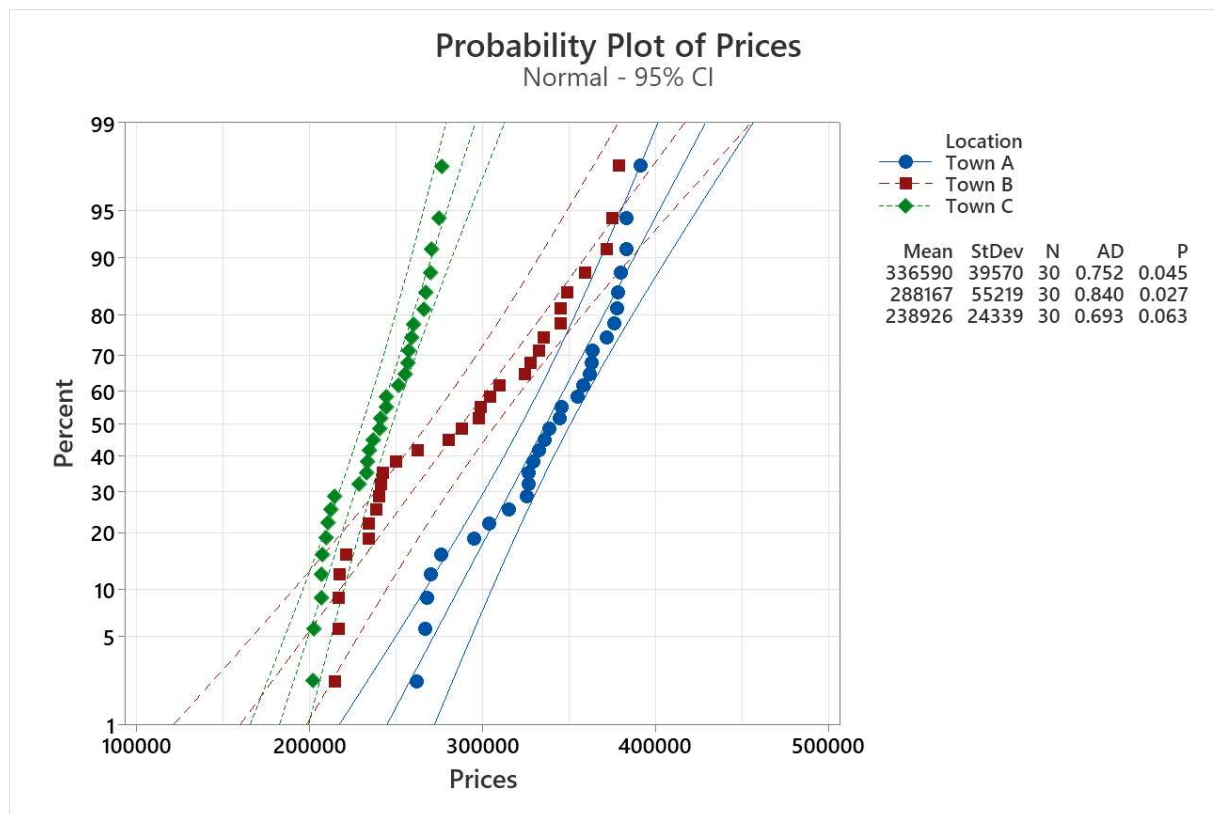
Stopping Distance = $-137.16 + 5.146 \text{ Speed} + 26.09 \text{ Driver Reaction Time}$

Settings

Variable	Setting
Speed	50
Driver Reaction Time	3

Prediction

Fit	SE Fit	95% CI	95% PI
198.417	1.69036	(194.929, 201.906)	(187.119, 209.716)



Descriptive Statistics

Location	N	Median	Mean Rank	Z-Value
Town A	30	341205	67.5	5.64
Town B	30	292687	45.5	0.00
Town C	30	240741	23.5	-5.64
Overall	90		45.5	

Test

Null hypothesis H_0 : All medians are equal

Alternative hypothesis H_1 : At least one median is different

DF	H-Value	P-Value
2	42.42	0.000

Boxplot of Town A, Town B, Town C

