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1a.) Model: Toyota Camry

1b.) City: Dallas, Texas

2.) Car Price =  $23366.013 - 0.263(\text{mileage})$

3.) Since the slope is negative then the more mileage the car have, the less the price goes.

4.) Car Price =  $23366.013 - 0.263(50000) = \$10216$

5.) Residual:  $y = 19898$ ,  $y^{\wedge} = 23366.013 - 0.263(24) = 23360$ . Therefore, residual =  $19895 - 23360 = -3465$

## Result 1: Simple Linear Regression for Toyota Camry

### Simple linear regression results:

Dependent Variable: Price

Independent Variable: Mileage

Price =  $23366.013 - 0.26343779 \text{ Mileage}$

Sample size: 12

R (correlation coefficient) = -0.68624882

R-sq = 0.47093744

Estimate of error standard deviation: 3721.1739

### Parameter estimates:

Parameter	Estimate	Std. Err.	Alternative	DF	T-Stat	P-value
Intercept	23366.013	1386.8431	$\neq 0$	10	16.848346	<0.0001
Slope	-0.26343779	0.088297818	$\neq 0$	10	-2.9835141	0.0137

### Analysis of variance table for regression model:

Source	DF	SS	MS	F-stat	P-value
Model	1	1.2325829e8	1.2325829e8	8.9013565	0.0137

Error	10	1.3847135e8	13847135
Total	11	2.6172964e8	

## Result 2: Scatterplot of Mileage horizontal against Price

Data set 1: Toyota Camry Cars in Dallas Texas