Linear Regression for Business Statistics

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$$Sales = \beta_0 + \beta_1 Price$$

$$Residuals = Sales^{actual} - Sales^{predicted}$$

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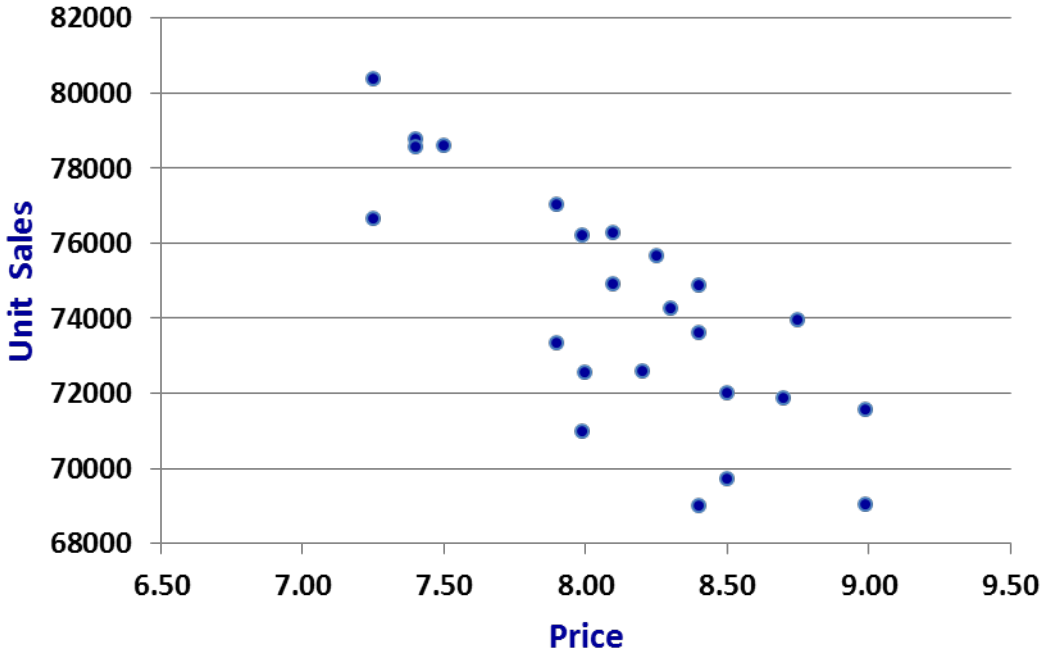

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$$Sales = \beta_0 + \beta_1 Price$$

$$Sales = 114215.08 - 4913.73 Price$$

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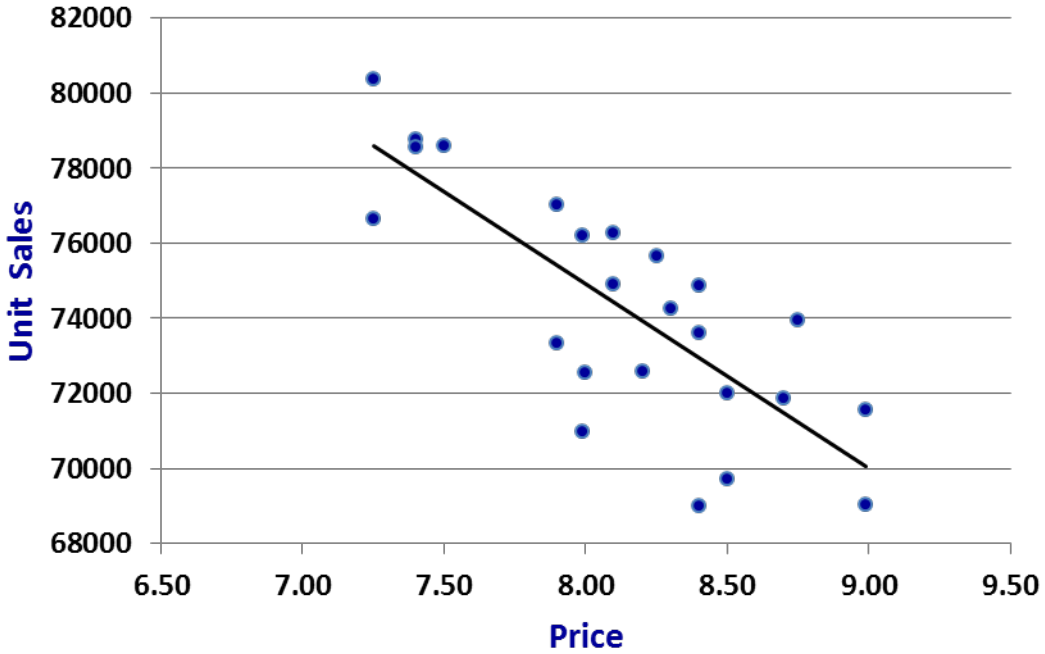

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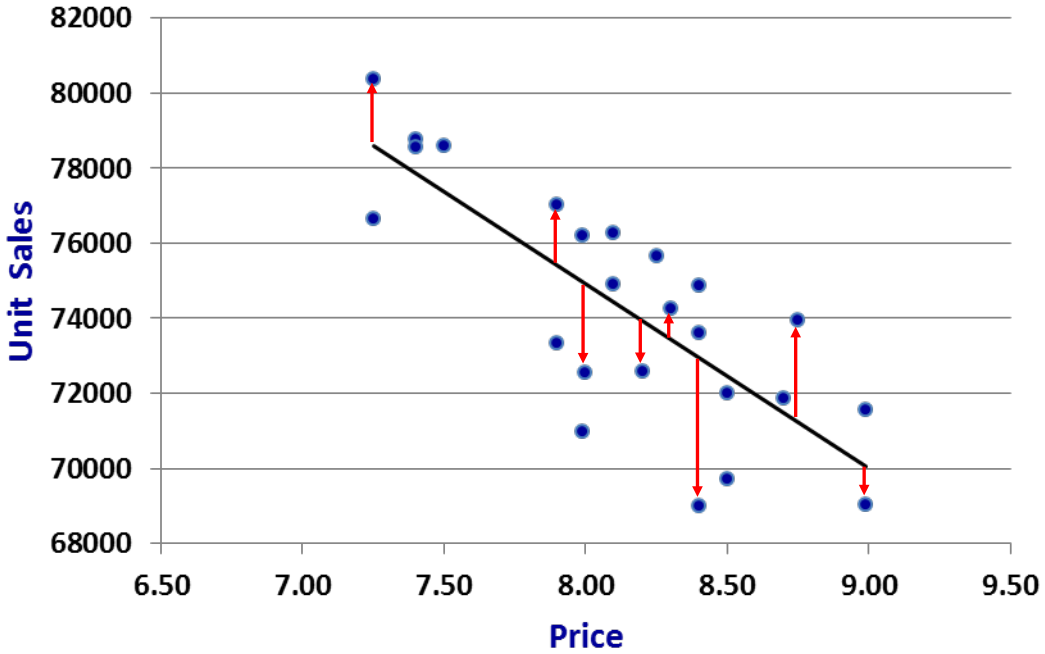

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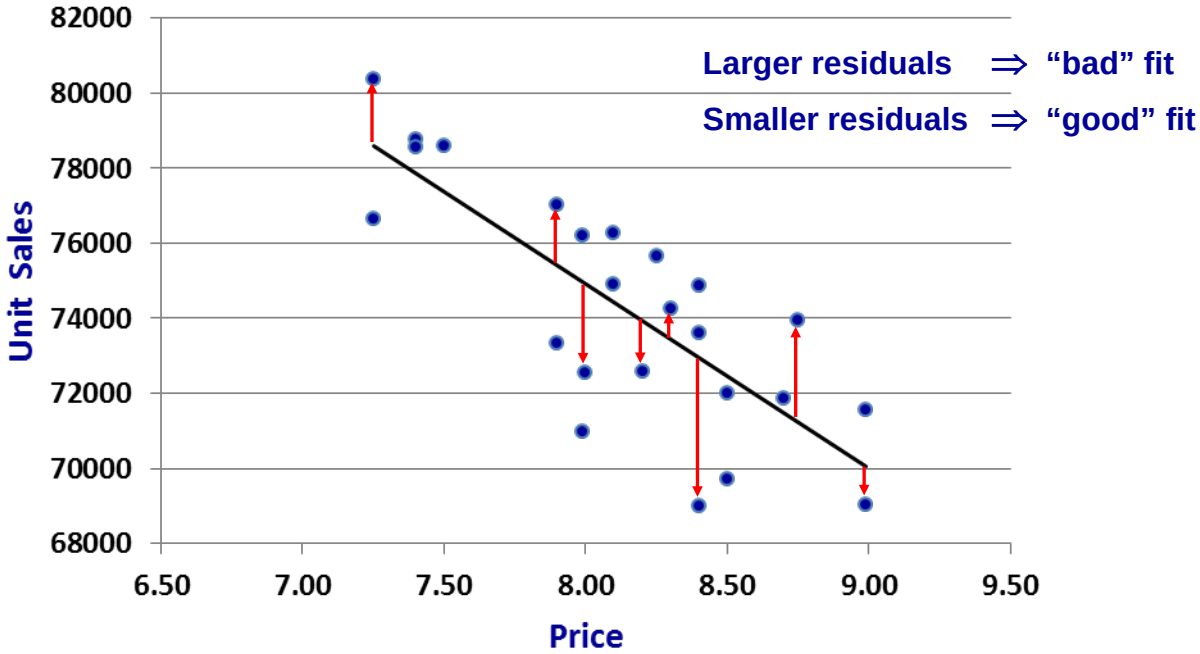

Linear Regression for Business Statistics

SUMMARY OUTPUT	
Regression Statistics	
Multiple R	0.786759321
R Square	0.618990229
Adjusted R Square	0.601671603
Standard Error	1997.152694
Observations	24

R-square

[A “goodness of fit” measure]

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- **Proportion of variation in the Y variable explained by the regression model.**
- **Values closer to 1 indicate a good fit.**

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- **Residuals and Errors.**
- **R-square: A “goodness of fit” measure.**

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Why do we have errors in the regression model ?

- **Omitted variables.**
- **Functional relationship between the Y and X variables.**
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