

Chapter 3 Learning Objectives	Section	Related Example on Page(s)	Relevant Chapter Review Exercise(s)	Can I do this?
Identify explanatory and response variables in situations where one variable helps to explain or influences the other.	3.1	144	R3.4	
Make a scatterplot to display the relationship between two quantitative variables.	3.1	145, 148	R3.4	
Describe the direction, form, and strength of a relationship displayed in a scatterplot and recognize outliers in a scatterplot.	3.1	147, 148	R3.1	
Interpret the correlation.	3.1	152	R3.3, R3.4	
Understand the basic properties of correlation, including how the correlation is influenced by outliers.	3.1	152, 156, 157	R3.1, R3.2	
Use technology to calculate correlation.	3.1	Activity on 152, 171	R3.4	
Explain why association does not imply causation.	3.1	Discussion on 156, 190	R3.6	
Interpret the slope and y intercept of a least-squares regression line.	3.2	166	R3.2, R3.4	
Use the least-squares regression line to predict y for a given x. Explain the dangers of extrapolation.	3.2	167, Discussion on 168	R3.2, R3.4, R3.5	
Calculate and interpret residuals.	3.2	169	R3.3, R3.4	
Explain the concept of least squares.	3.2	Discussion on 169	R3.5	
Determine the equation of a least-squares regression line using technology or computer output.	3.2	Technology Corner on 171, 181	R3.3, R3.4	
Construct and interpret residual plots to assess whether a linear model is appropriate.	3.2	Discussion on 175, 180	R3.3, R3.4	
Interpret the standard deviation of the residuals and r^2 and use these values to assess how well the least-squares regression line models the relationship between two variables.	3.2	180	R3.3, R3.5	
Describe how the slope, y intercept, standard deviation of the residuals, and r^2 are influenced by outliers.	3.2	Discussion on 188	R3.1	
Find the slope and y intercept of the least-squares regression line from the means and standard deviations of x and y and their correlation.	3.2	183	R3.5	