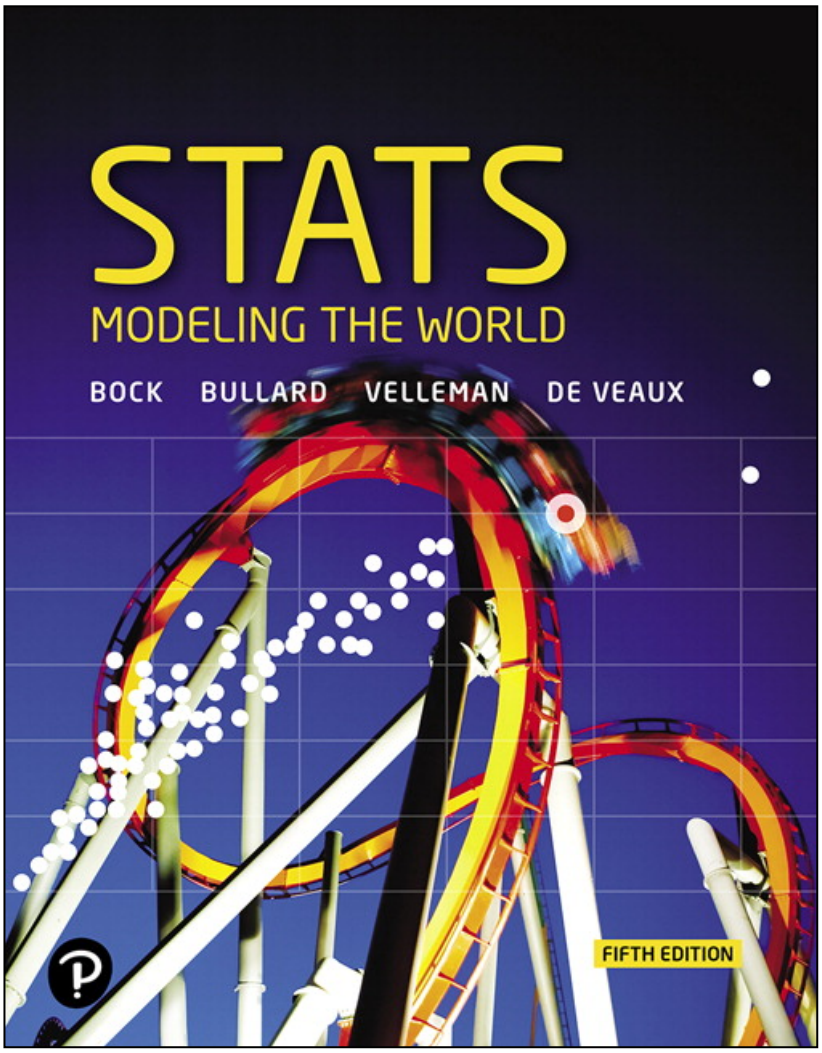
A Correlation of



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UNC-4 An interval of values should be used to estimate parameters, in order to account for uncertainty.	7.7 Justifying a Claim About the Difference of Two Means Based on a Confidence Interval	
	UNC-4.Z Interpret a confidence interval for a difference of population means. [Skill 4.B]	**SE/TE:** 610, 610-612, 624 (#8), 625 (#15), 627 (#22, 23)
	UNC-4.AA Justify a claim based on a confidence interval for a difference of population means. [Skill 4.D]	**SE/TE:** 624 (#5, 6), 625 (#15)
	UNC-4.AB Identify the effects of sample size on the width of a confidence interval for the difference of two means. [Skill 4.A]	**SE/TE:** 643-644
VAR-7 The t-distribution may be used to model variation.	7.8 Setting Up a Test for the Difference of Two Population Means	
	VAR-7.F Identify an appropriate selection of a testing method for a difference of two population means. [Skill 1.E]	**SE/TE:** 613-618
	VAR-7.G Identify the null and alternative hypotheses for a difference of two population means. [Skill 1.F]	**SE/TE:** 615-616, 625 (#9), 626 (#20), 629 (#33, 37), 630 (#38), 631 (#47)
	VAR-7.H Verify the conditions for the significance test for the difference of two population means. [Skill 4.C]	**SE/TE:** 615-616, 617-618, 626 (#20), 628 (#33)

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Enduring Understanding	**Topic/Learning Objective**	
VAR-7 The t-distribution may be used to model variation.	7.9 Carrying Out a Test for the Difference of Two Population Means	
	VAR-7.I Calculate an appropriate test statistic for a difference of two means. [Skill 3.E]	**SE/TE:** 613-618, 618-619, 620-621, 624-632
	DAT-3 Significance testing allows us to make decisions about hypotheses within a particular context.	
	DAT-3.G Interpret the p-value of a significance test for a difference of population means. [Skill 4.B]	**SE/TE:** 615-616, 617-618, 625 (#9), 628 (#27)
	DAT-3.H Justify a claim about the population based on the results of a significance test for a difference of two population means in context. [Skill 4.E]	**SE/TE:** 625-632
	7.10 Skills Focus: Selecting, Implementing, and Communicating Inference Procedures (This topic is intended to focus on the skill of selecting an appropriate inference procedure, now that students have a range of options. Students should be given opportunities to practice when and how to apply all learning objectives relating to inference involving proportions or means.)	Opportunities to address this standard can be found on the following pages: **SE/TE:** 488-491, 513-516, 537-542, 559-563, 597-604, 624-632, 648-659

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Enduring Understanding	**Topic/Learning Objective**	
UNIT 8 Inference for Categorical Data: Chi-Square		
VAR-1 Given that variation may be random or not, conclusions are uncertain.	8.1 Introducing Statistics: Are My Results Unexpected?	
	VAR-1.J Identify questions suggested by variation between observed and expected counts in categorical data. [Skill 1.A]	**SE/TE:** 669-671
VAR-8 The chi-square distribution may be used to model variation.	8.2 Setting Up a Chi-Square Goodness of Fit Test	
	VAR-8.A Describe chi-square distributions. [Skill 3.C]	**SE/TE:** 669-670, 672
	VAR-8.B Identify the null and alternative hypotheses in a test for a distribution of proportions in a set of categorical data. [Skill 1.F]	**SE/TE:** 672-673, 673-675, 677-678, 693-694, 695 (#23 0, 696 (#24)
	VAR-8.C Identify an appropriate testing method for a distribution of proportions in a set of categorical data. [Skill 1.E]	**SE/TE:** 673-675, 675-676
	VAR-8.D Calculate expected counts for the chi-square test for goodness of fit. [Skill 3.A]	**SE/TE:** 670, 673-675, 677, 693-694
	VAR-8.E Verify the conditions for making statistical inferences when testing goodness of fit for a chi-square distribution. [Skill 4.C]	**SE/TE:** 671-672, 673-675, 694, 698 (#28)
VAR-8 The chi-square distribution may be used to model variation.	8.3 Carrying Out a Chi-Square Test for Goodness of Fit	
	VAR-8.F Calculate the appropriate statistic for the chi-square test for goodness of fit. [Skill 3.E]	**SE/TE:** 673-675, 677, 693 (#1-6), 694-700
	VAR-8.G Determine the p-value for chi-square test for goodness of fit significance test. [Skill 3.E]	**SE/TE:** 673-675, 693 (#1-6), 694, 695 (#23), 696 (#24), 676 (#36, 37)

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Enduring Understanding	**Topic/Learning Objective**	
DAT-3 Significance testing allows us to make decisions about hypotheses within a particular context.	DAT-3.I Interpret the p-value for the chi-square test for goodness of fit. [Skill 4.B]	**SE/TE:** 673-675, 693 (#1-6), 694, 695 (#23), 697 (#36, 37)
	DAT-3.J Justify a claim about the population based on the results of a chi-square test for goodness of fit. [Skill 4.E]	**SE/TE:** 673-675, 693-700
VAR-8 The chi-square distribution may be used to model variation.	8.4 Expected Counts in Two-Way Tables	
	VAR-8.H Calculate expected counts for two-way tables of categorical data. [Skill 3.A]	**SE/TE:** 677-678, 679-681, 696
VAR-8 The chi-square distribution may be used to model variation.	8.5 Setting Up a Chi-Square Test for Homogeneity or Independence	
	VAR-8.I Identify the null and alternative hypotheses for a chi-square test for homogeneity or independence. [Skill 1.F]	**SE/TE:** 677-681, 682-683, 683-686
	VAR-8.J Identify an appropriate testing method for comparing distributions in two-way tables of categorical data. [Skill 1.E]	**SE/TE:** 678, 680-683, 686-684, 685-687, 687-689
	VAR-8.K Verify the conditions for making statistical inferences when testing a chi-square distribution for independence or homogeneity. [Skill 4.C]	**SE/TE:** 678, 680-681, 684, 685
VAR-8 The chi-square distribution may be used to model variation.	8.6 Carrying Out a Chi-Square Test for Homogeneity or Independence	
	VAR-8.L Calculate the appropriate statistic for a chi-square test for homogeneity or independence. [Skill 3.E]	**SE/TE:** 680-681, 685-687, 690, 696-700

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Enduring Understanding	**Topic/Learning Objective**	
DAT-3 Significance testing allows us to make decisions about hypotheses within a particular context.	DAT-3.K Interpret the p-value for the chi-square test for homogeneity or independence. [Skill 4.B]	**SE/TE:** 680-681, 685-687, 696-700
	DAT-3.L Justify a claim about the population based on the results of a chi-square test for homogeneity or independence. [Skill 4.E]	**SE/TE:** 680-681, 685-687, 696-700
	8.7 Skills Focus: Selecting an Appropriate Inference Procedure for Categorical Data (This topic is intended to focus on the skill of selecting an appropriate inference procedure now that students have a range of options. Students should be given opportunities to practice when and how to apply all learning objectives relating to inference for categorical data.)	**SE/TE:** 693-700

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Enduring Understanding	**Topic/Learning Objective**	
UNIT 9 Inference for Quantitative Data: Slopes		
VAR-1 Given that variation may be random or not, conclusions are uncertain.	9.1 Introducing Statistics: Do Those Points Align?	
	VAR-1.K Identify questions suggested by variation in scatter plots. [Skill 1.A]	**SE/TE:** 702-703
UNC-4 An interval of values should be used to estimate parameters, in order to account for uncertainty.	9.2 Confidence Intervals for the Slope of a Regression Model	
	UNC-4.AC Identify an appropriate confidence interval procedure for a slope of a regression model. [Skill 1.D]	**SE/TE:** 712
	UNC-4.AD Verify the conditions to calculate confidence intervals for the slope of a regression model. [Skill 4.C]	**SE/TE:** 704-706, 706-707, 708-709, 723
	UNC-4.AE Determine the given margin of error for the slope of a regression model. [Skill 3.D]	**SE/TE:** 711-712
	UNC-4.AF Calculate an appropriate confidence interval for the slope of a regression model. [Skill 3.D]	**SE/TE:** 714-716, 724-733
UNC-4 An interval of values should be used to estimate parameters, in order to account for uncertainty.	9.3 Justifying a Claim About the Slope of a Regression Model Based on a Confidence Interval	
	UNC-4.AG Interpret a confidence interval for the slope of a regression model. [Skill 4.B]	**SE/TE:** 714-716, 724-733
	UNC-4.AH Justify a claim based on a confidence interval for the slope of a regression model. [Skill 4.D]	**SE/TE:** 714-716, 724-733
	UNC-4.AI Identify the effects of sample size on the width of a confidence interval for the slope of a regression model. [Skill 4.A]	**SE/TE:** 718-720

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Enduring Understanding	**Topic/Learning Objective**	
VAR-7 The t-distribution may be used to model variation.	9.4 Setting Up a Test for the Slope of a Regression Model	
	VAR-7.J Identify the appropriate selection of a testing method for a slope of a regression model. [Skill 1.E]	**SE/TE:** 703-704, 709-711, 712
	VAR-7.K Identify appropriate null and alternative hypotheses for a slope of a regression model. [Skill 1.F]	**SE/TE:** 712, 714-716, 724-733
	VAR-7.L Verify the conditions for the significance test for the slope of a regression model. [Skill 4.C]	**SE/TE:** 714-716, 724-733
VAR-7 The t-distribution may be used to model variation.	9.5 Carrying Out a Test for the Slope of a Regression Model	
	VAR-7.M Calculate an appropriate test statistic for the slope of a regression model. [Skill 3.E]	**SE/TE:** 714-716, 724-733
DAT-3 Significance testing allows us to make decisions about hypotheses within a particular context.	DAT-3.M Interpret the p-value of a significance test for the slope of a regression model. [Skill 4.B]	**SE/TE:** 714-716, 724-733
	DAT-3.N Justify a claim about the population based on the results of a significance test for the slope of a regression model. [Skill 4.E]	**SE/TE:** 714-716, 724-733
	9.6 Skills Focus: Selecting an Appropriate Inference Procedure (This topic is intended to focus on the skill of selecting an appropriate inference procedure now that students have a range of options. Students should be given opportunities to practice when and how to apply all learning objectives relating to inference.)	**SE/TE:** 724-733