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A Correlation of

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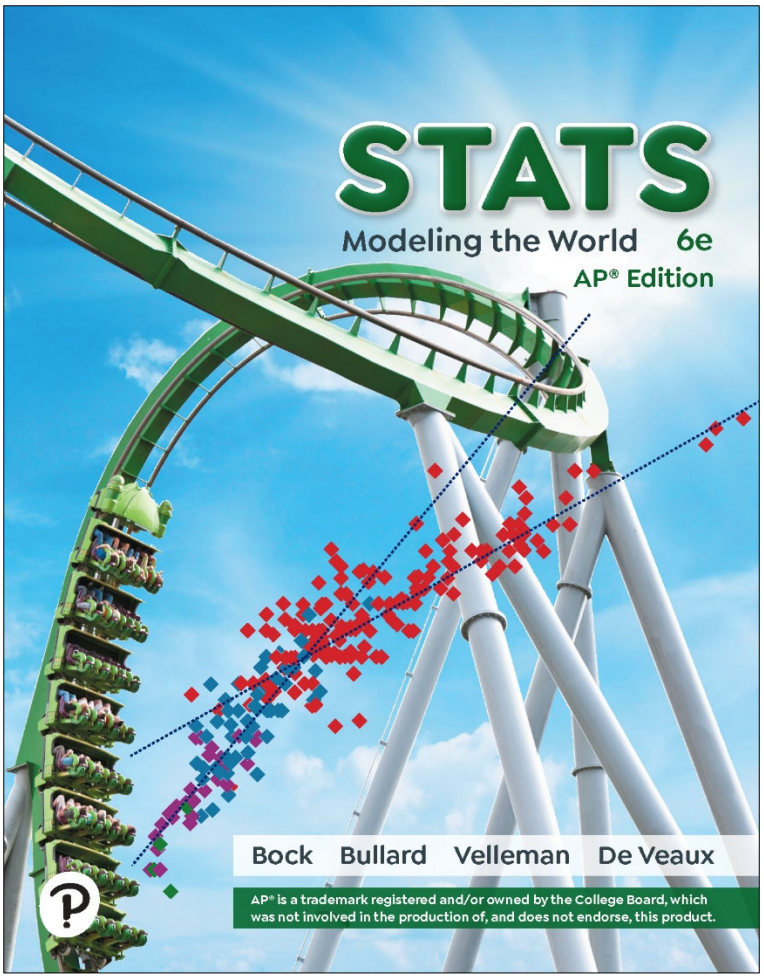

to the

Advanced Placement Statistics Standards

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	VAR-7.F Identify an appropriate selection of a testing method for a difference of two population means. [Skill 1.E]	**SE/TE:** 632-637
	VAR-7.G Identify the null and alternative hypotheses for a difference of two population means. [Skill 1.F]	**SE/TE:** 633-635, 644 (#9), 645 (#20), 648 (#33, 37), 649 (#38), 650 (#48)
	VAR-7.H Verify the conditions for the significance test for the difference of two population means. [Skill 4.C]	**SE/TE:** 633-637, 645 (#20), 648 (#33)
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:** 632-640, 643-651
	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:** 633-637, 644 (#9), 647 (#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:** 644-651
	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:** 505-509, 530-534, 555-560, 577-581, 616-623, 643-651, 667-683
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:** 689-691

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Enduring Understanding	**Topic/Learning Objective**	
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:** 689-690, 692
	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:** 692-695, 698, 711-713
	VAR-8.C Identify an appropriate testing method for a distribution of proportions in a set of categorical data. [Skill 1.E]	**SE/TE:** 693-696
	VAR-8.D Calculate expected counts for the chi-square test for goodness of fit. [Skill 3.A]	**SE/TE:** 690, 693-695, 711-712
	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:** 691-695, 712, 714(#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:** 693-695, 697, 711 (#1-6), 712-718
	VAR-8.G Determine the p-value for chi-square test for goodness of fit significance test. [Skill 3.E]	**SE/TE:** 693-695, 711(#1-6), 712, 713 (#23), 714 (#24), 715-716 (#36, 41)
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:** 693-695, 711 (#1-6), 712, 713 (#23), 715-716 (#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:** 693-695, 711-718
VAR-8 The chi-square distribution may be used to model variation.	8.4 Expected Counts in Two-Way Tables	
	VAR-8.HCalculate expected counts for two-way tables of categorical data. [Skill 3.A]	**SE/TE:** 697-701, 714

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Enduring Understanding	**Topic/Learning Objective**	
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:** 697-706
	VAR-8.J Identify an appropriate testing method for comparing distributions in two-way tables of categorical data. [Skill 1.E]	**SE/TE:** 698, 700-703, 705-707
	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:** 698-705
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:** 700-701, 704-706, 714-718
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:** 700-701, 704-706, 714-718
	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:** 700-701, 704-706, 714-718
	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:** 711-718

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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:** 720-721
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:** 730
	UNC-4.AD Verify the conditions to calculate confidence intervals for the slope of a regression model. [Skill 4.C]	**SE/TE:** 722-727. 741
	UNC-4.AE Determine the given margin of error for the slope of a regression model. [Skill 3.D]	**SE/TE:** 729-730
	UNC-4.AF Calculate an appropriate confidence interval for the slope of a regression model. [Skill 3.D]	**SE/TE:** 732-734, 742-751
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:** 732-734, 742-751
	UNC-4.AH Justify a claim based on a confidence interval for the slope of a regression model. [Skill 4.D]	**SE/TE:** 732-734, 742-751
	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:** 736-738

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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:** 721-722, 727-730
	VAR-7.K Identify appropriate null and alternative hypotheses for a slope of a regression model. [Skill 1.F]	**SE/TE:** 730, 732-734, 742-751
	VAR-7.L Verify the conditions for the significance test for the slope of a regression model. [Skill 4.C]	**SE/TE:** 732-734, 742-751
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:** 732-734, 742-751
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:** 732-734, 742-751
	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:** 732-734, 742-751
	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:** 742-751