

Unit	Lesson	Lesson Objectives
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Data Analysis**Introduction to AP Statistics****Introduction to Unit 1****Introduction to Statistics**

Classify a variable as categorical, discrete quantitative, or continuous quantitative.

Identify a variable from a set of data.

Identify an individual from a set of data.

Reading Lesson Introduction**Categorical Data Displays**

Determine if a graphical display is appropriate for a given data set.

Determine what makes a graph of categorical data deceptive.

Identify a frequency table and a relative frequency table given data.

Interpret a bar graph or pie chart.

Reading Lesson 1.1, Part 1**Relative Frequencies**

Complete a two-way table, and calculate marginal and conditional distributions.

Create conditional relative frequency distributions.

Create marginal relative frequency distributions.

Given a two-way table, calculate conditional relative frequency distributions.

Given a two-way table, calculate marginal and joint relative frequency distributions.

Interpret frequencies appropriately when given data from samples that differ considerably in sample size for two categorical variables.

Reading Lesson 1.1, Part 2**Comparing Two Categorical Variables**

Compare distributions of categorical data using segmented or side-by-side bar graphs.

Decide whether two categorical variables are associated using segmented or side-by-side bar graphs.

Display three categorical variables in side-by-side bar graphs.

Use appropriate phrasing in the depth and detail required by the College Board to compare and contrast categorical variables.

Reading Lesson 1.1, Part 3**Describing and Comparing Data with Dotplots and Stemplots**

Compare two distributions using dotplots or stemplots.

Identify and/or describe a dotplot.

Identify and/or describe a stemplot.

Reading Lesson 1.2, Part 1

Unit	Lesson	Lesson Objectives
		<p>Describing and Comparing Data with Histograms</p> <ul style="list-style-type: none"> Compare two distributions using histograms. Identify the patterns, shape, and spread of a distribution using histograms. Relate measures of center to the shape of a distribution using histograms. <p>Reading Lesson 1.2, Part 2</p> <p>Measures of Center and Location</p> <ul style="list-style-type: none"> Analyze the effect of extreme values on the value of the mean and median. Analyze the relationship between center and shape. Calculate measures of center, given a data set or a graphical display. Interpret the measures of center. <p>Reading Lesson 1.3, Part 1</p> <p>Measures of Variability</p> <ul style="list-style-type: none"> Calculate the range, standard deviation, or interquartile range of a univariate data set. Compare the spread given graphical displays of two univariate data sets. Interpret the range, standard deviation, or interquartile range of a univariate data set. Use a graphing calculator to compute the numerical summary of a univariate data set. <p>Reading Lesson 1.3, Part 2</p> <p>Boxplots and Outliers</p> <ul style="list-style-type: none"> Compare distributions presented in parallel boxplots. Create a boxplot using a graphing calculator. Identify if a univariate data set contains any outliers. Identify the percent and number of values lying in each portion of a boxplot. Represent univariate data using a boxplot. <p>Reading Lesson 1.3, Part 3</p> <p>The AP Statistics Exam: Multiple-Choice and Free-Response Sections</p> <p>Unit 1 Test</p>
The Normal Distribution		
		<p>Introduction to Unit 2</p> <p>Describing Location within a Distribution</p> <ul style="list-style-type: none"> Calculate the percentile for individual values in a quantitative data set. Estimate the percentile of a value given a cumulative relative frequency graph. Interpret the percentile for individual values in a quantitative data set. <p>Reading Lesson 2.1, Part 1</p>

Unit	Lesson	Lesson Objectives
		Calculating and Interpreting z-Scores <ul style="list-style-type: none">Calculate a data value given a z-score, standard deviation, and mean.Calculate a z-score.Compare performance using three or more z-scores.Compare performance using two or more z-scores.Interpret a z-score.
		Reading Lesson 2.1, Part 2
		Effect of Linear Transformations <ul style="list-style-type: none">Describe the center, shape, and spread of a distribution whose values have been transformed by a combination of addition or subtraction and by multiplying or dividing by a constant value.Describe the center, shape, and spread of a distribution whose values have been transformed by adding or subtracting a constant value.Describe the center, shape, and spread of a distribution whose values have been transformed by multiplying or dividing by a constant value.
		Reading Lesson 2.1, Part 3
		Uniform Density Curves <ul style="list-style-type: none">Calculate probabilities using the appropriate area within a uniform density curve.Describe a density curve.Estimate the mean and median value of a density curve.
		Reading Lesson 2.2, Part 1
		Normal Distributions <ul style="list-style-type: none">Calculate probabilities using the empirical rule.Describe a Normal distribution using the empirical rule.Describe the properties of a Normal distribution.
		Reading Lesson 2.2, Part 2
		Finding Areas within a Normal Distribution <ul style="list-style-type: none">Estimate the proportion of values in a Normal distribution between two values using a Normal distribution table.Estimate the proportion of values in a Normal distribution for inclusive intervals of less than or equal to, greater than or equal to, or between and including values.Estimate the proportion of values in a Normal distribution to the left of a value or to the right of a value using a Normal distribution table.Estimate the proportion of values in a Normal distribution using a graphing calculator.Estimate the proportion of values in a standard Normal distribution using a graphing calculator.
		Reading Lesson 2.2, Part 3
		Finding Values from Probabilities <ul style="list-style-type: none">Determine the data-value, x, in a Normal distribution for a given percentile.Determine the value in a Normal distribution that bounds a given area, using a graphing calculator.Determine the z-score for a given probability.
		Reading Lesson 2.2, Part 4

Unit	Lesson	Lesson Objectives
		Assessing Normality For a set of quantitative data, decide if the distribution is approximately Normal using a Normal probability plot. For a set of quantitative data, decide if the distribution is approximately Normal using graphical evidence. For a set of quantitative data, decide if the distribution is approximately Normal using numerical evidence.
		Reading Lesson 2.2, Part 5
		Unit 2 AP Practice Free-Response Questions
		Unit 2 Test
		Simple Linear Regression
		Introduction to Unit 3
		The Relationship between Two Quantitative Variables Create a scatterplot using a graphing calculator. Describe the direction, form, strength, and unusual observations given a scatterplot. Identify the explanatory and response variable. Represent two quantitative variables using a scatterplot.
		Reading Lesson 3.1, Part 1
		Correlation Describe the effect of unusual observations on the correlation. Distinguish between correlation and causation. Interpret the correlation of a linear relationship between two quantitative variables.
		Reading Lesson 3.1, Part 2
		Making Predictions from a Least-Squares Regression Line Interpret the slope and y -intercept of a linear model. Make a prediction using a linear model.
		Reading Lesson 3.2, Part 1
		Calculating the Least-Squares Regression Line Compute a least-squares regression line and correlation using technology. Explain why the line that is the best fit for a linear relationship is called the least-squares regression line. Identify a least-squares regression line using computer output.
		Reading Lesson 3.2, Part 2
		Residuals Assess linearity based upon a residual plot. Calculate residuals. Create a residual plot on the graphing calculator. Create a residual plot.
		Reading Lesson 3.2, Part 3

Unit	Lesson	Lesson Objectives
		<p><i>R</i>-squared and <i>s</i></p> <ul style="list-style-type: none"> Describe the effect that influential points have on the least-squares regression line. Determine r^2 using a graphing calculator or computer output. Identify s. Interpret r^2 and s in context. <p>Reading Lesson 3.2, Part 4</p> <p>Calculating a Least-Squares Regression Line from Summary Statistics</p> <ul style="list-style-type: none"> Calculate the y-intercept of a least-squares regression line from summary statistics. Calculate the slope of a least-squares regression line from summary statistics. Write the equation of a least-squares regression line from summary statistics. <p>Reading Lesson 3.2, Part 5</p> <p>Transforming to Achieve Linearity</p> <ul style="list-style-type: none"> Predict the response variable based upon the equation of a least-squares regression line that describes a transformed data set. Transform a nonlinear data set using powers, roots, or logarithms. Write the equation of a least-squares regression line that describes a transformed data set given computer output. <p>Reading Lesson 3.3, Part 1</p> <p>Choosing the Best Model</p> <ul style="list-style-type: none"> Assess how well a model fits a given data set. Choose an appropriate model for a bivariate data set given regression output and residual plots. Make a prediction based on the computer output provided for various regression models. <p>Reading Lesson 3.3, Part 2</p> <p>Unit 3 AP Practice Free-Response Questions</p> <p>Unit 3 Test</p>
Sampling and Experimentation		
		<p>Introduction to Unit 4</p> <p>Introduction to Sampling Methods</p> <ul style="list-style-type: none"> Analyze a study to determine if bias is present and whether that bias leads to an overestimate or underestimate of the population parameter. Describe a population and sample given a description of a study. Identify whether a study utilized convenience sampling or voluntary response sampling. <p>Reading Lesson 4.1, Part 1</p> <p>Simple Random Sample</p> <ul style="list-style-type: none"> Describe the process of simple random sampling. Explain the process of generating a simple random sample using a random number generator. Explain the process of generating a simple random sample using a table of random digits. <p>Reading Lesson 4.1, Part 2</p>

Unit	Lesson	Lesson Objectives
		Other Sampling Methods <ul style="list-style-type: none">Describe the process and/or advantages and disadvantages of cluster sampling.Describe the process and/or advantages and disadvantages of stratified random sampling.Describe the process and/or advantages and disadvantages of systematic random sampling.Distinguish between stratified random sampling, systematic random sampling, and cluster sampling.
		Reading Lesson 4.1, Part 3
		Considerations When Sampling <ul style="list-style-type: none">Describe the direction of the bias presented in a study.Describe the sampling problems of undercoverage, nonresponse, response, and question-wording bias.Identify whether a study is affected by undercoverage, nonresponse, response, or question-wording bias.
		Reading Lesson 4.1, Part 4
		Sampling Project
		Observational Studies and Experiments <ul style="list-style-type: none">Describe the effect of confounding.Distinguish between an observational study and an experiment.Identify the explanatory variable, response variable, treatments, experimental units/subjects, factors, and levels of an experimental design.
		Reading Lesson 4.2, Part 1
		Additional Principles of Experimental Design <ul style="list-style-type: none">Identify the benefits of using the principle of comparison within an experimental design.Identify the benefits of using the principle of control and replication within an experimental design.Identify the benefits of using the principle of random assignment within an experimental design.Identify the placebo effect, as well as the benefits of blindness, within an experimental design.
		Reading Lesson 4.2, Part 2
		How to Experiment Well <ul style="list-style-type: none">Describe the randomization step within an experimental design using a random number generator.Describe the randomization step within an experimental design using a table of random digits.Describe the randomization step within an experimental design using slips of paper.Identify the reason for randomization for a well-constructed experimental design.
		Reading Lesson 4.2, Part 3
		Experimental Designs <ul style="list-style-type: none">Describe the structure of a completely randomized design, including details about the randomization process.Describe the structure of a randomized block design, including details about the randomization process.Describe the structure of the matched pairs version of a randomized block design, including details about the randomization process.
		Reading Lesson 4.2, Part 4

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Scope of Inference

- Describe the concept of sampling variability with regards to the size of the sample.
- Determine if the results of an experiment are statistically significant based upon simulated results.
- Determine the appropriate scope of inference for the study design used.

Reading Lesson 4.3**Unit 4 AP Practice Free-Response Questions****Unit 4 Test****Probability****Introduction to Unit 5****Introduction to Probability**

- Conduct a simulation using a graphing calculator.
- Describe how a simulation is used to imitate a random process.
- Describe the law of large numbers.
- Interpret probability as the long-run relative frequency of an event.

Reading Lesson 5.1**Probability Rules**

- Apply the basic probability rules, which indicate that the probability of an event is a number between 0 and 1 and that the sum of the probabilities of all outcomes in the sample space is 1.
- Apply the complement rule and the addition rule for mutually exclusive events.
- Identify a probability model to describe a random process.

Reading Lesson 5.2, Part 1**Applying Probability Rules**

- Determine probabilities using a two-way table.
- Determine probabilities using a Venn diagram.

Reading Lesson 5.2, Part 2**Conditional Probabilities**

- Calculate a conditional probability.
- Determine if two events are independent.
- Interpret a conditional probability.

Reading Lesson 5.3, Part 1**The Multiplication Rule for Dependent Events**

- Calculate a probability using a tree diagram.
- Calculate a probability using the general multiplication rule.
- Use a tree diagram to determine the sample space.

Reading Lesson 5.3, Part 2

Unit	Lesson	Lesson Objectives
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The Multiplication Rule for Independent Events

Determine if it is appropriate to use the multiplication rule for independent events, the addition rule for mutually exclusive events, or neither.

Calculate a probability using the multiplication rule for independent events.

Calculate the probability of "at least one" using the multiplication rule for independent events or other multi-step probabilities.

Reading Lesson 5.3, Part 3**Unit 5 AP Practice Free-Response Questions****Unit 5 Test****Random Variables****Introduction to Unit 6****Introduction to Random Variables**

Calculate the probability of an event given a probability distribution of a discrete random variable.

Describe the shape of a probability distribution histogram of a discrete random variable.

Identify a probability distribution histogram of a discrete random variable.

Interpret the probability of an event given a probability distribution of a discrete random variable.

Reading Lesson 6.1, Part 1**Discrete Random Variables – Mean**

Calculate the mean, median, and/or standard deviation of the probability distribution of a discrete random variable.

Compare the shape, center, and/or variability given two probability distribution histograms.

Interpret the standard deviation of the probability distribution of a discrete random variable.

Reading Lesson 6.1, Part 2**Continuous Random Variables**

Calculate a probability or value for a Normal random variable.

Calculate a probability or value for a uniform random variable.

Determine the mean of a uniform random variable.

Distinguish between a discrete and a continuous random variable.

Reading Lesson 6.1, Part 3**Transforming Random Variables**

Calculate a probability of a value within the distribution of a transformed random variable.

Calculate the measures of center and variability of a transformed random variable.

Interpret the mean and standard deviation of a transformed random variable.

Reading Lesson 6.2, Part 1**Combining Two Random Variables**

Calculate a probability based upon the sum or difference of two or more random variables.

Calculate the mean and standard deviation of a linear combination of random variables.

Calculate the mean and standard deviation of the sum or difference of two or more random variables.

Interpret the mean and standard deviation of the sum or difference of two or more random variables.

Unit	Lesson	Lesson Objectives
		<p>Reading Lesson 6.2, Part 2</p> <p>Binomial Random Variables</p> <ul style="list-style-type: none"> Calculate the mean and standard deviation of a binomial random variable. Describe the shape, center, and/or variability of a probability histogram of a binomial random variable. Determine if a scenario describes a binomial setting. <p>Reading Lesson 6.3, Part 1</p> <p>Binomial Probabilities</p> <ul style="list-style-type: none"> Approximate binomial probabilities using a Normal distribution. Calculate cumulative binomial probabilities using a graphing calculator. Calculate cumulative binomial probabilities using the binomial probability formula. Calculate the binomial probability $P(X = k)$ using the binomial probability formula. Calculate the binomial probability $P(X = k)$ using a graphing calculator. <p>Reading Lesson 6.3, Part 2</p> <p>Geometric Random Variables</p> <ul style="list-style-type: none"> Calculate a geometric probability using a graphing calculator. Calculate a geometric probability using the geometric probability formula. Calculate the mean and standard deviation of a geometric random variable. Determine if a scenario describes a geometric setting. <p>Reading Lesson 6.3, Part 3</p> <p>Unit 6 AP Practice Free-Response Questions</p> <p>Unit 6 Test</p>
Cumulative Exam 1		
Sampling Distributions		
		<p>Introduction to Unit 7</p> <p>Introduction to Sampling Distributions</p> <ul style="list-style-type: none"> Distinguish between the population distribution, sample distribution, and a sampling distribution of a statistic. Identify a sampling distribution. Identify the population, parameter, sample, and statistic given a scenario. <p>Reading Lesson 7.1, Part 1</p> <p>Sampling Distributions – Center and Variability</p> <ul style="list-style-type: none"> Describe the variability of a sampling distribution as it relates to the size of the sample. Determine if a sample statistic is an unbiased estimator of the population parameter. Evaluate a claim about a population parameter based upon a sampling distribution of a statistic. <p>Reading Lesson 7.1, Part 2</p>

Unit	Lesson	Lesson Objectives
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Sampling Distribution of the Sample Proportion

Determine the shape, mean, and/or standard deviation of the sampling distribution of the difference in two sample proportions.

Determine the shape, mean, and/or standard deviation of the sampling distribution of the sample proportion.

Interpret the standard deviation of the sampling distribution of the sample proportion or the sampling distribution of the difference in two sample proportions.

Reading Lesson 7.2, Part 1
Calculating Probabilities for Sampling Distribution

Calculate a probability based upon the sampling distribution of \hat{p} .

Calculate a probability based upon the sampling distribution of $\hat{p}_1 - \hat{p}_2$.

Determine if there is convincing evidence against a claim based upon a calculated probability.

Reading Lesson 7.2, Part 2
Sampling Distribution of the Sample Mean

Describe the shape of the sampling distribution of the sample mean.

Describe the shape, mean, and/or standard deviation of the sampling distribution of the difference in two sample means.

Describe the shape, mean, and/or standard deviation of the sampling distribution of the sample mean.

Reading Lesson 7.3, Part 1
Using the Central Limit Theorem

Calculate probabilities given a non-Normal population, when appropriate, based upon the sampling distribution of the sample mean or difference in sample means.

Calculate probabilities given a Normal population based upon the sampling distribution of the sample mean or difference in sample means.

Reading Lesson 7.3, Part 2
Unit 7 AP Practice Free-Response Questions
Unit 7 Test
Estimating Proportions with Confidence
Introduction to Unit 8
Introduction to Confidence Intervals

Calculate the value of a point estimate and/or the margin of error of a given confidence interval.

Evaluate a claim about a population parameter given a confidence interval.

Interpret a confidence interval.

Reading Lesson 8.1, Part 1
More about Confidence Intervals

Determine how the margin of error and width of the interval is affected by the confidence level and sample size.

Identify the sources of variability that are and are not accounted for by the margin of error in a confidence interval.

Interpret the confidence level.

Reading Lesson 8.1, Part 2

Unit	Lesson	Lesson Objectives
		Preparing to Estimate a Population Proportion <ul style="list-style-type: none">Calculate the point estimate and standard error of the sample proportion.Determine the critical value for a specific confidence level for a population proportion using a table and technology.Verify if each of the conditions for calculating a confidence interval for a population proportion are met.
		Reading Lesson 8.2, Part 1
		Estimating a Population Proportion <ul style="list-style-type: none">Calculate the minimum sample size that is needed to construct a confidence interval for a population proportion with a given confidence level and a given margin of error.Construct a confidence interval for a population proportion.Evaluate a claim about a population proportion based upon a calculated confidence interval.
		Reading Lesson 8.2, Part 2
		Estimating the Difference between Two Population Proportions <ul style="list-style-type: none">Construct a confidence interval for a difference in two population proportions using a graphing calculator.Construct a confidence interval for a difference in two population proportions.Determine whether the conditions for calculating a confidence interval for a difference in two population proportions are met.Evaluate a claim about a difference in two population proportions based upon a calculated confidence interval.
		Reading Lesson 8.3
		Unit 8 AP Practice Free-Response Questions
		Unit 8 Test
		Testing Claims about Proportions
		Introduction to Unit 9
		Introduction to Hypothesis Testing <ul style="list-style-type: none">Draw a conclusion based upon the P-value.Interpret the P-value.State appropriate hypotheses for performing a hypothesis test about a population proportion.
		Reading Lesson 9.1, Part 1
		Type I and Type II Errors <ul style="list-style-type: none">Describe and give a consequence of a Type I and Type II error.Draw a conclusion based upon an estimated P-value.Estimate a P-value based upon the results of a simulation.
		Reading Lesson 9.1, Part 2
		Preparing to Test a Claim about a Population Proportion <ul style="list-style-type: none">Calculate the test statistic and the P-value for a significance test about a population proportion.Determine if the conditions needed to carry out a significance test about a population proportion are met.Draw a conclusion based upon a calculated P-value.
		Reading Lesson 9.2, Part 1

Unit	Lesson	Lesson Objectives
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Testing a Claim about a Population Proportion

- Calculate a test statistic and P -value for a hypothesis test about a population proportion using a graphing calculator.
- Conduct a hypothesis test about a population proportion given computer output.
- Conduct a hypothesis test about a population proportion.
- Describe the power of a test and/or what influences the power of a test.

Reading Lesson 9.2, Part 2**Testing a Claim about a Difference between Proportions**

- Calculate a test statistic and P -value for a hypothesis test about a population proportion using a graphing calculator.
- Conduct a hypothesis test about a difference in two population proportions.
- Perform one step of a hypothesis test for a difference in two population proportions.

Reading Lesson 9.3**Unit 9 AP Practice Free-Response Questions****Unit 9 Test****Estimating Means with Confidence****Introduction to Unit 10****Preparing to Estimate a Population Mean**

- Calculate the standard error of the mean.
- Determine if the conditions required to compute a $C\%$ confidence interval for a population mean are met.
- Determine the t critical value needed to compute a $C\%$ confidence interval for a population mean.
- Interpret the standard error of the mean.

Reading Lesson 10.1, Part 1**Estimating a Population Mean**

- Construct a confidence interval for a population mean using a graphing calculator.
- Construct a confidence interval for a population mean.
- Describe how the margin of error of a confidence interval can be reduced.
- Evaluate a claim about a population mean based upon a calculated confidence interval.

Reading Lesson 10.1, Part 2**Estimating a Difference in Two Population Means**

- Construct a confidence interval for a difference in two population means using a graphing calculator.
- Construct a confidence interval for a difference in two population means.
- Determine if the conditions required to compute a confidence interval for a difference in two population means are met.
- Evaluate a claim about the difference in the population means based upon a calculated confidence interval.

Reading Lesson 10.2, Part 1

Unit	Lesson	Lesson Objectives
		Estimating the Mean Difference <ul style="list-style-type: none">Calculate the mean difference and the standard deviation of the differences for paired data.Construct a confidence interval for a mean difference using a graphing calculator.Construct a confidence interval for a mean difference.Evaluate a claim about a population mean difference based upon a confidence interval.
		Reading Lesson 10.2, Part 2
		Unit 10 AP Practice Free-Response Questions
		Unit 10 Test
		Testing Claims about Means
		Introduction to Unit 11
		Preparing to Test a Claim about a Mean <ul style="list-style-type: none">Calculate the test statistic and the P-value for a hypothesis test about a population mean.Determine if the conditions needed to carry out a hypothesis test about a population mean are satisfied.Draw a conclusion based upon a calculated P-value.State appropriate hypotheses for performing a hypothesis test about a population mean.
		Reading Lesson 11.1, Part 1
		Testing a Claim about a Population Mean <ul style="list-style-type: none">Calculate a test statistic and P-value for a hypothesis test about a population mean using a graphing calculator.Conduct a hypothesis test about a population mean.Identify and give a consequence of a Type I and Type II error.Interpret the P-value.
		Reading Lesson 11.1, Part 2
		Significance Tests and Confidence Intervals <ul style="list-style-type: none">Describe the power of a test and/or what influences the power of a test.State a conclusion about a significance test for a population mean based upon a confidence interval.
		Reading Lesson 11.1, Part 3
		Testing a Claim about a Difference between Means <ul style="list-style-type: none">Calculate a test statistic and P-value for a significance test about a difference in two population means using a graphing calculator.Conduct a significance test about a difference in two population means.Perform one step of a significance test for a difference in two population means.
		Reading Lesson 11.2, Part 1
		Testing a Claim about a Mean Difference <ul style="list-style-type: none">Calculate a test statistic and P-value for a hypothesis test about a mean difference using a graphing calculator.Conduct a hypothesis test about a mean difference.Perform one step of a hypothesis test for a mean difference.
		Reading Lesson 11.2, Part 2

Unit	Lesson	Lesson Objectives
		<p>Choosing the Appropriate Inference Procedure</p> <ul style="list-style-type: none"> Determine the appropriate inference procedure. Distinguish between one sample, two samples, and paired data. <p>Reading Lesson 11.2, Part 3</p> <p>Statistical Inference Project</p> <p>Unit 11 AP Practice Free-Response Questions</p> <p>Unit 11 Test</p>
Inference for Distributions and Relationships		
		<p>Introduction to Unit 12</p> <p>Preparing to Conduct a Chi-Square Test for Goodness of Fit</p> <ul style="list-style-type: none"> Calculate the χ^2 P-value using technology. Calculate the χ^2 test statistic and P-value. Determine if the conditions for a χ^2 test for goodness of fit are met. State the hypotheses for a χ^2 test for goodness of fit. <p>Reading Lesson 12.1, Part 1</p> <p>Conducting a Chi-Square Test for Goodness of Fit</p> <ul style="list-style-type: none"> Perform a χ^2 test for goodness of fit given a distribution of equally likely outcomes. Perform a χ^2 test for goodness of fit given a distribution with claimed proportions. Perform a follow-up analysis to investigate how an observed distribution differs from the hypothesized distribution. Perform a χ^2 test for goodness of fit using technology. <p>Reading Lesson 12.1, Part 2</p> <p>Preparing to Conduct Inference for Two-Way Tables</p> <ul style="list-style-type: none"> Calculate the χ^2 test statistic and P-value for inference for a two-way table. Check the conditions for a χ^2 test for inference for a two-way table. Distinguish between a χ^2 test for homogeneity and a χ^2 test for association/independence. <p>Reading Lesson 12.2, Part 1</p> <p>Chi-Square Test for Homogeneity</p> <ul style="list-style-type: none"> Calculate the expected counts, χ^2 test statistic, and P-value for a χ^2 test for homogeneity using technology. Carry out a χ^2 test for homogeneity given computer output. Carry out a χ^2 test for homogeneity. Identify which observed counts were greater than expected and which observed counts were less than expected. State appropriate hypotheses for a χ^2 test for homogeneity. <p>Reading Lesson 12.2, Part 2</p>

Unit	Lesson	Lesson Objectives
		<p>Chi-Square Test of Association/Independence</p> <p>Calculate the expected counts, χ^2 test statistic, and P-value for a χ^2 test for association/independence using technology.</p> <p>Carry out a χ^2 test for association/independence given computer output.</p> <p>Carry out a χ^2 test for association/independence.</p> <p>Identify which observed counts were greater than expected and which observed counts were less than expected.</p> <p>State appropriate hypotheses for a χ^2 test for association/independence.</p> <p>Reading Lesson 12.2, Part 3</p> <p>Preparing for Inference about Slope</p> <p>Check the conditions for inference about slope.</p> <p>Describe the shape, center, and/or variability of the sampling distribution of the regression slope.</p> <p>Estimate the parameters for the intercept, slope, standard error of the slope, and/or the standard deviation of the residuals using computer output.</p> <p>Reading Lesson 12.3, Part 1</p> <p>Confidence Intervals for Slope</p> <p>Construct a confidence interval for slope using a graphing calculator.</p> <p>Construct a confidence interval for slope using computer output.</p> <p>Interpret a confidence interval for slope.</p> <p>Reading Lesson 12.3, Part 2</p> <p>Significance Test for Slope</p> <p>Carry out a significance test for slope using a graphing calculator.</p> <p>Carry out a significance test for slope using computer output.</p> <p>Interpret the P-value of a significance test for slope.</p> <p>Reading Lesson 12.3, Part 3</p> <p>Unit 12 AP Practice Free-Response Questions</p> <p>Unit 12 Test</p>
Cumulative Exam 2		
AP Review		
		<p>Preparing for the Exam</p> <p>Unit 1 Review</p> <p>Unit 2 Review</p> <p>Unit 3 Review</p> <p>Unit 4 Review</p> <p>Unit 5 Review</p> <p>Unit 6 Review</p> <p>Unit 7 Review</p> <p>Unit 8 Review</p> <p>Unit 9 Review</p>

Unit	Lesson	Lesson Objectives
		Unit 10 Review
		Unit 11 Review
		Unit 12 Review
		Practice Exam 1
		Practice Exam 1 – Multiple-Choice Section
		Practice Exam 1 – Free-Response Section
		Practice Exam 2
		Practice Exam 2 – Multiple-Choice Section
		Practice Exam 2 – Free-Response Section