

**Curriculum Map**  
**Statistics and Probability Honors (348)**  
**Saugus High School**  
**Saugus Public Schools**  
**2009-2010**

Week 1		Week 2	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<p><b>The students will:</b>  <b>14.0</b> Students organize and describe distributions of data by using a number of different methods, including frequency tables, histograms, standard line graphs and bar graphs, stem-and-leaf displays, scatterplots, and box-and-whisker plots.</p>		<p><b>The students will:</b>  <b>14.0</b> Students organize and describe distributions of data by using a number of different methods, including frequency tables, histograms, standard line graphs and bar graphs, stem-and-leaf displays, scatterplots, and box-and-whisker plots.</p>	
<b>Unit/Topic/Lesson</b> <b>UNIT ONE</b> <b>Introduction to Statistics</b>		<b>Unit/Topic/Lesson</b> <b>UNIT TWO</b> <b>Working with Data</b>	
<ol style="list-style-type: none"> <li>1. Overview of Statistical Concepts</li> <li>2. The Nature of Data</li> <li>3. Statistics (Uses and Abuses)</li> <li>4. Design of Experiments</li> </ol>		<ol style="list-style-type: none"> <li>1. Overview of Data Concepts</li> <li>2. Summarizing Data with Frequency Tables</li> <li>3. Pictures of Data</li> <li>4. Measures of Center</li> </ol>	
<b>Mission and Expectations</b>		<b>Mission and Expectations</b>	
<ol style="list-style-type: none"> <li>1. <i>Critical Thinking Skills</i></li> <li>2. <i>Problem Solving Skills</i></li> <li>3. <i>Test Taking Skills</i></li> </ol>		<ol style="list-style-type: none"> <li>1. <i>Critical Thinking Skills</i></li> <li>2. <i>Problem Solving Skills</i></li> <li>3. <i>Test Taking Skills</i></li> </ol>	
<b>Objectives</b>	<b>Essential Question</b>	<b>Objectives</b>	<b>Essential Question</b>
<ol style="list-style-type: none"> <li>1. To understand what is statistics studies.</li> <li>2. To understand how to design an experiment.</li> </ol>	<p>What is important in designing an experiment?</p>	<ol style="list-style-type: none"> <li>1. To be able to display data in a variety of graphs and pictures.</li> <li>2. To work with data using frequency tables.</li> </ol>	<p>What are some of the most useful graph of data display?</p>
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<i>Essentials of Statistics ©2002</i> <ol style="list-style-type: none"> <li>1. Chapter One lessons</li> <li>2. Chapter One exercises</li> <li>3. Teacher Made Worksheets</li> <li>4. Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics ©2002</i> <ol style="list-style-type: none"> <li>1. PowerPoint Presentations</li> <li>2. Test Bank CD</li> <li>3. Data Bank Disk for Data Manipulation</li> <li>4. Internet Resources</li> </ol>	<i>Essentials of Statistics ©2002</i> <ol style="list-style-type: none"> <li>1. Chapter Two lessons</li> <li>2. Chapter Two exercises</li> <li>3. Teacher Made Worksheets</li> <li>4. Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics ©2002</i> <ol style="list-style-type: none"> <li>1. PowerPoint Presentations</li> <li>2. Test Bank CD</li> <li>3. Data Bank Disk for Data Manipulation</li> <li>4. Internet Resources</li> </ol>
<b>Evaluation/Activities</b>	<b>Completion date:</b>	<b>Evaluation/Activities</b>	<b>Completion date:</b>
<p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p> <p><b>Test:</b> On the concepts involving the Introduction to Statistics.</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 3		Week 4	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<p><b>The students will:</b>  <b>14.0</b> Students organize and describe distributions of data by using a number of different methods, including frequency tables, histograms, standard line graphs and bar graphs, stem-and-leaf displays, scatterplots, and box-and-whisker plots.</p> <p><b>6.0</b> Students know the definition of the <i>variance of a discrete random variable</i> and can determine the variance for a particular discrete random variable.</p>		<p><b>The students will:</b>  <b>1.0</b> Students solve probability problems with finite sample spaces by using the rules for addition, multiplication, and complementation for probability distributions and understand the simplifications that arise with independent events.</p> <p><b>2.0</b> Students know the definition of <i>conditional probability</i> and use it to solve for probabilities in finite sample spaces.</p>	
<b>Unit/Topic/Lesson</b> <b>UNIT TWO</b> <b>Working with Data</b>		<b>Unit/Topic/Lesson</b> <b>UNIT THREE</b> <b>Probability</b>	
<ol style="list-style-type: none"> <li>1. Measure of Variation</li> <li>2. Measures of Position</li> <li>3. Exploratory Data Analysis</li> </ol>		<ol style="list-style-type: none"> <li>1. Introduction to Probability Concepts</li> <li>2. Fundamentals of Probability</li> <li>3. Addition Rule</li> <li>4. Basic Multiplication Rules</li> </ol>	
<b>Mission and Expectations</b>		<b>Mission and Expectations</b>	
<ol style="list-style-type: none"> <li>1. Critical Thinking Skills</li> <li>2. Problem Solving Skills</li> <li>3. Test Taking Skills</li> </ol>		<ol style="list-style-type: none"> <li>1. Critical Thinking Skills</li> <li>2. Problem Solving Skills</li> <li>3. Test Taking Skills</li> </ol>	
<b>Objectives</b>	<b>Essential Question</b>	<b>Objectives</b>	<b>Essential Question</b>
<ol style="list-style-type: none"> <li>1. To understand the empirical rule.</li> <li>2. To understand variation.</li> <li>3. To understand position of data.</li> </ol>	<p>What is standard deviation and how do you find the percentile ranking?</p>	<ol style="list-style-type: none"> <li>1. To work with basic rules of probability.</li> <li>2. To understand how to make inference about the population based on probability.</li> </ol>	<p>How do you use probability to infer about the population?</p>
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>1. Chapter Two lessons</li> <li>2. Chapter Two exercises</li> <li>3. Teacher Made Worksheets</li> <li>4. Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>1. PowerPoint Presentations</li> <li>2. Test Bank CD</li> <li>3. Data Bank Disk for Data Manipulation</li> <li>4. Internet Resources</li> </ol>	<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>1. Chapter Three lessons</li> <li>2. Chapter Three exercises</li> <li>3. Teacher Made Worksheets</li> <li>4. Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>1. PowerPoint Presentations</li> <li>2. Test Bank CD</li> <li>3. Data Bank Disk for Data Manipulation</li> <li>4. Internet Resources</li> </ol>
<b>Evaluation/Activities</b>	<b>Completion date:</b>	<b>Evaluation/Activities</b>	<b>Completion date:</b>
<p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p> <p><b>Test:</b> On the concepts involving Working with Data.</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 5		Week 6	
<p align="center"><b>Performance Standards</b></p> <p><i>The students will:</i></p> <p><b>1.0</b> Students solve probability problems with finite sample spaces by using the rules for addition, multiplication, and complementation for probability distributions and understand the simplifications that arise with independent events.</p> <p><b>2.0</b> Students know the definition of <i>conditional probability</i> and use it to solve for probabilities in finite sample spaces.</p>		<p align="center"><b>Performance Standards</b></p> <p><i>The students will:</i></p> <p><b>1.0</b> Students solve probability problems with finite sample spaces by using the rules for addition, multiplication, and complementation for probability distributions and understand the simplifications that arise with independent events.</p> <p><b>2.0</b> Students know the definition of <i>conditional probability</i> and use it to solve for probabilities in finite sample spaces.</p> <p><b>3.0</b> Students demonstrate an understanding of the notion of <i>discrete random variables</i> by using this concept to solve for the probabilities of outcomes, such as the probability of the occurrence of five or fewer heads in 14 coin tosses.</p>	
<p align="center"><b>Unit/Topic/Lesson</b> <b>UNIT THREE</b> <b>Probability</b></p> <ol style="list-style-type: none"> <li>Multiplication Rule of Complements</li> <li>Multiplication Rule Using Condition Probability</li> <li>Counting Rules</li> </ol>		<p align="center"><b>Unit/Topic/Lesson</b> <b>UNIT FOUR</b> <b>Probability Distributions</b></p> <ol style="list-style-type: none"> <li>Introduction to Probability Distributions</li> <li>Random Variables</li> <li>Binomial Probability Distributions</li> </ol>	
<p align="center"><b>Mission and Expectations</b></p> <p>1. <i>Critical Thinking Skills</i>      2. <i>Problem Solving Skills</i>      3. <i>Test Taking Skills</i></p>		<p align="center"><b>Mission and Expectations</b></p> <p>1. <i>Critical Thinking Skills</i>      2. <i>Problem Solving Skills</i>      3. <i>Test Taking Skills</i></p>	
<p align="center"><b>Objectives</b></p> <ol style="list-style-type: none"> <li>To understand different rules of probability.</li> <li>To understand the counting concept.</li> <li>To be able to use probability with these rules.</li> </ol>	<p align="center"><b>Essential Question</b></p> <p>What is important about permutation, combination, tree diagrams and other methods of counting?</p>	<p align="center"><b>Objectives</b></p> <ol style="list-style-type: none"> <li>To understand binomial distribution.</li> <li>To work with rules of binomial distribution.</li> </ol>	<p align="center"><b>Essential Question</b></p> <p>What is binomial distribution?</p>
<p align="center"><b>Teacher Resources</b></p> <p><i>Essentials of Statistics</i> ©2002</p> <ol style="list-style-type: none"> <li>Chapter Three lessons</li> <li>Chapter Three exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<p align="center"><b>Media Resources</b></p> <p><i>Essentials of Statistics</i> ©2002</p> <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>	<p align="center"><b>Teacher Resources</b></p> <p><i>Essentials of Statistics</i> ©2002</p> <ol style="list-style-type: none"> <li>Chapter Four lessons</li> <li>Chapter Four exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<p align="center"><b>Media Resources</b></p> <p><i>Essentials of Statistics</i> ©2002</p> <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>
<p align="center"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p> <p><b>Test:</b> On the concepts involving Probability.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p align="center"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 7		Week 8	
<p align="center"><b>Performance Standards</b></p> <p><i>The students will:</i>  <b>3.0</b> Students demonstrate an understanding of the notion of <i>discrete random variables</i> by using this concept to solve for the probabilities of outcomes, such as the probability of the occurrence of five or fewer heads in 14 coin tosses.  <b>5.0</b> Students know the definition of the <i>mean of a discrete random variable</i> and can determine the mean for a particular discrete random variable  <b>7.0</b> Students demonstrate an understanding of the standard distributions (normal, binomial, and exponential) and can use the distributions to solve for events in problems in which the distribution belongs to those families.  <b>10.0</b> Students know the definitions of the <i>mean, median, and mode of distribution</i> of data and can compute each of them in particular situations.</p>		<p align="center"><b>Performance Standards</b></p> <p><i>The students will:</i>  <b>2.0</b> Students know the definition of <i>conditional probability</i> and use it to solve for probabilities in finite sample spaces.  <b>4.0</b> Students understand the notion of a <i>continuous random variable</i> and can interpret the probability of an outcome as the area of a region under the graph of the probability density function associated with the random variable.  <b>7.0</b> Students demonstrate an understanding of the standard distributions (normal, binomial, and exponential) and can use the distributions to solve for events in problems in which the distribution belongs to those families.</p>	
<p align="center"><b>Unit/Topic/Lesson</b>  <b>UNIT FOUR</b>  <b>Probability Distributions</b></p> <ol style="list-style-type: none"> <li>Mean for Binomial Distribution</li> <li>Variance for Binomial Distribution</li> <li>Standard Deviation for Binomial Distribution</li> </ol>		<p align="center"><b>Unit/Topic/Lesson</b>  <b>UNIT FIVE</b>  <b>Normal Probability Distributions</b></p> <ol style="list-style-type: none"> <li>Introduction to Normal Probability Distributions</li> <li>The Standard Normal Distribution</li> <li>Finding Probabilities with Normal Distributions</li> </ol>	
<p align="center"><b>Mission and Expectations</b></p> <p><i>1. Critical Thinking Skills    2. Problem Solving Skills    3. Test Taking Skills</i></p>		<p align="center"><b>Mission and Expectations</b></p> <p><i>1. Critical Thinking Skills    2. Problem Solving Skills    3. Test Taking Skills</i></p>	
<p align="center"><b>Objectives</b></p> <ol style="list-style-type: none"> <li>To understand the mean for binomial distribution.</li> <li>To understand variance for binomial distribution.</li> <li>To understand standard deviation for binomial distribution.</li> </ol>	<p align="center"><b>Essential Question</b></p> <p>How do you use binomial distribution to infer about the population?</p>	<p align="center"><b>Objectives</b></p> <ol style="list-style-type: none"> <li>To understand normal distribution.</li> <li>To understand probabilities associated with normal distribution.</li> </ol>	<p align="center"><b>Essential Question</b></p> <p>What is meant by normal distribution?</p>
<p align="center"><b>Teacher Resources</b>  <i>Essentials of Statistics ©2002</i></p> <ol style="list-style-type: none"> <li>Chapter Four lessons</li> <li>Chapter Four exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<p align="center"><b>Media Resources</b>  <i>Essentials of Statistics ©2002</i></p> <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>	<p align="center"><b>Teacher Resources</b>  <i>Essentials of Statistics ©2002</i></p> <ol style="list-style-type: none"> <li>Chapter Five lessons</li> <li>Chapter Five exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<p align="center"><b>Media Resources</b>  <i>Essentials of Statistics ©2002</i></p> <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>
<p align="center"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.  <b>Test:</b> On the concepts involving Probability Distributions.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p align="center"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 9		Week 10	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<p><b>The students will:</b>            7.0 Students demonstrate an understanding of the standard distributions (normal, binomial, and exponential) and can use the distributions to solve for events in problems in which the distribution belongs to those families.            9.0 Students know the central limit theorem and can use it to obtain approximations for probabilities in problems of finite sample spaces in which the probabilities are distributed binomially.</p>		<p><b>The students will:</b>            7.0 Students demonstrate an understanding of the standard distributions (normal, binomial, and exponential) and can use the distributions to solve for events in problems in which the distribution belongs to those families.            9.0 Students know the central limit theorem and can use it to obtain approximations for probabilities in problems of finite sample spaces in which the probabilities are distributed binomially.</p>	
<b>Unit/Topic/Lesson</b> <b>UNIT FIVE</b> <b>Normal Probability Distributions</b>		<b>Unit/Topic/Lesson</b> <b>UNIT FIVE</b> <b>Normal Probability Distributions</b>	
<ol style="list-style-type: none"> <li>1. Finding Values with Normal Distributions</li> <li>2. The Central Limit Theorem</li> </ol>		<ol style="list-style-type: none"> <li>1. Normal Distribution as an Approximation to Binomial Distribution</li> <li>2. Review of Normal Probability Distributions</li> </ol>	
<b>Mission and Expectations</b>		<b>Mission and Expectations</b>	
<ol style="list-style-type: none"> <li>1. Critical Thinking Skills</li> <li>2. Problem Solving Skills</li> <li>3. Test Taking Skills</li> </ol>		<ol style="list-style-type: none"> <li>1. Critical Thinking Skills</li> <li>2. Problem Solving Skills</li> <li>3. Test Taking Skills</li> </ol>	
<b>Objectives</b>	<b>Essential Question</b>	<b>Objectives</b>	<b>Essential Question</b>
<ol style="list-style-type: none"> <li>1. To understand the central limit theorem.</li> <li>2. To understand its connection to normal distribution</li> </ol>	What is the central limit theorem?	<ol style="list-style-type: none"> <li>1. To understand the approximation of binomial to a normal distribution.</li> <li>2. To understand normal distributions.</li> </ol>	How do you approximate binomial distribution to normal distribution?
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<i>Essentials of Statistics ©2002</i> <ol style="list-style-type: none"> <li>1. Chapter Five lessons</li> <li>2. Chapter Five exercises</li> <li>3. Teacher Made Worksheets</li> <li>4. Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics ©2002</i> <ol style="list-style-type: none"> <li>1. PowerPoint Presentations</li> <li>2. Test Bank CD</li> <li>3. Data Bank Disk for Data Manipulation</li> <li>4. Internet Resources</li> </ol>	<i>Essentials of Statistics ©2002</i> <ol style="list-style-type: none"> <li>1. Chapter Five lessons</li> <li>2. Chapter Five exercises</li> <li>3. Teacher Made Worksheets</li> <li>4. Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics ©2002</i> <ol style="list-style-type: none"> <li>1. PowerPoint Presentations</li> <li>2. Test Bank CD</li> <li>3. Data Bank Disk for Data Manipulation</li> <li>4. Internet Resources</li> </ol>
<b>Evaluation/Activities</b>		<b>Evaluation/Activities</b>	
<p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.  <b>Test:</b> On the concepts involving Normal Probability Distributions.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 11		Week 12	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<p><i>The students will:</i>  <b>11.0</b> Students compute the variance and the standard deviation of a distribution of data.  <b>15.0</b> Students are familiar with the notions of a statistic of a distribution of values, of the sampling distribution of a statistic, and of the variability of a statistic.</p>		<p><i>The students will:</i>  <b>11.0</b> Students compute the variance and the standard deviation of a distribution of data.  <b>15.0</b> Students are familiar with the notions of a statistic of a distribution of values, of the sampling distribution of a statistic, and of the variability of a statistic.</p>	
<b>Unit/Topic/Lesson</b> <b>UNIT SIX</b> <b>Estimates and Sample Sizes</b>		<b>Unit/Topic/Lesson</b> <b>UNIT SIX</b> <b>Estimates and Sample Sizes</b>	
<ol style="list-style-type: none"> <li>Introduction to Estimates and Sample Sizes</li> <li>Estimating a Population Mean: Large Samples</li> </ol>		<ol style="list-style-type: none"> <li>Estimating a Population Mean: Small Samples</li> <li>Determining Sample Size Required to Estimate <math>\mu</math></li> </ol>	
<b>Mission and Expectations</b>		<b>Mission and Expectations</b>	
<ol style="list-style-type: none"> <li>Critical Thinking Skills</li> <li>Problem Solving Skills</li> <li>Test Taking Skills</li> </ol>		<ol style="list-style-type: none"> <li>Critical Thinking Skills</li> <li>Problem Solving Skills</li> <li>Test Taking Skills</li> </ol>	
<b>Objectives</b>	<b>Essential Question</b>	<b>Objectives</b>	<b>Essential Question</b>
<ol style="list-style-type: none"> <li>To work with large samples of data.</li> <li>To estimate mean of the population from large samples.</li> </ol>	How do you estimate $\mu$ from large samples?	<ol style="list-style-type: none"> <li>To understand how to estimate <math>\mu</math> from small samples.</li> <li>To determine the sample size required to estimate <math>\mu</math>.</li> </ol>	How do you decide what is a proper sample size to estimate $\mu$ ?
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<i>Essentials of Statistics</i> ©2002  <ol style="list-style-type: none"> <li>Chapter Six lessons</li> <li>Chapter Six exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics</i> ©2002  <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>	<i>Essentials of Statistics</i> ©2002  <ol style="list-style-type: none"> <li>Chapter Six lessons</li> <li>Chapter Six exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics</i> ©2002  <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>
<b>Evaluation/Activities</b>		<b>Evaluation/Activities</b>	
<b>Homework:</b> To be given daily on each introduced topic <b>Review:</b> All weekly concepts. <b>Quiz:</b> Assessments given as warranted by the curriculum.	<b>Completion date:</b>  <b>Completed by:</b>  <b>Comments:</b>	<b>Homework:</b> To be given daily on each introduced topic <b>Review:</b> All weekly concepts. <b>Quiz:</b> Assessments given as warranted by the curriculum.	<b>Completion date:</b>  <b>Completed by:</b>  <b>Comments:</b>

Week 13		Week 14	
<p align="center"><b>Performance Standards</b></p> <p><i>The students will:</i>  <b>11.0</b> Students compute the variance and the standard deviation of a distribution of data.  <b>18.0</b> Students determine the <math>P</math>-value for a statistic for a simple random sample from a normal distribution.</p>		<p align="center"><b>Performance Standards</b></p> <p><i>The students will:</i>  <b>15.0</b> Students are familiar with the notions of a statistic of a distribution of values, of the sampling distribution of a statistic, and of the variability of a statistic.  <b>18.0</b> Students determine the <math>P</math>-value for a statistic for a simple random sample from a normal distribution.</p>	
<p align="center"><b>Unit/Topic/Lesson</b>  <b>UNIT SIX</b>  <b>Estimates and Sample Sizes</b></p> <p>1. Estimating a Population Proportion  2. Estimating a Population Variance</p>		<p align="center"><b>Unit/Topic/Lesson</b>  <b>UNIT SEVEN</b>  <b>Hypothesis Testing</b></p> <p>1. Introduction to Hypothesis Testing  2. Fundamentals of Hypothesis Testing</p>	
<p align="center"><b>Mission and Expectations</b></p> <p>1. <i>Critical Thinking Skills</i>    2. <i>Problem Solving Skills</i>    3. <i>Test Taking Skills</i></p>		<p align="center"><b>Mission and Expectations</b></p> <p>1. <i>Critical Thinking Skills</i>    2. <i>Problem Solving Skills</i>    3. <i>Test Taking Skills</i></p>	
<p align="center"><b>Objectives</b></p> <p>1. To understand how to estimate the population proportion.  2. To understand how to estimate the population variance.</p>	<p align="center"><b>Essential Question</b></p> <p>How do you estimate properly the population proportion and variance?</p>	<p align="center"><b>Objectives</b></p> <p>1. To understand why testing is necessary.  2. To understand hypothesis testing.</p>	<p align="center"><b>Essential Question</b></p> <p>What is the hypothesis testing?</p>
<p align="center"><b>Teacher Resources</b>  <i>Essentials of Statistics</i> ©2002</p> <p>1. Chapter Six lessons  2. Chapter Six exercises  3. Teacher Made Worksheets  4. Teacher Made Assessments</p>	<p align="center"><b>Media Resources</b>  <i>Essentials of Statistics</i> ©2002</p> <p>1. PowerPoint Presentations  2. Test Bank CD  3. Data Bank Disk for Data Manipulation  4. Internet Resources</p>	<p align="center"><b>Teacher Resources</b>  <i>Essentials of Statistics</i> ©2002</p> <p>1. Chapter Seven lessons  2. Chapter Seven exercises  3. Teacher Made Worksheets  4. Teacher Made Assessments</p>	<p align="center"><b>Media Resources</b>  <i>Essentials of Statistics</i> ©2002</p> <p>1. PowerPoint Presentations  2. Test Bank CD  3. Data Bank Disk for Data Manipulation  4. Internet Resources</p>
<p align="center"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.  <b>Test:</b> On the concepts involving estimates and Sample Size.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p align="center"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 15		Week 16	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<p><b>The students will:</b>  <b>8.0</b> Students determine the mean and the standard deviation of a normally distributed random variable.  <b>10.0</b> Students know the definitions of the <i>mean, median, and mode of distribution</i> of data and can compute each of them in particular situations.  <b>17.0</b> Students determine confidence intervals for a simple random sample from a normal distribution of data and determine the sample size required for a desired margin of error.  <b>18.0</b> Students determine the <i>P</i>-value for a statistic for a simple random sample from a normal distribution.</p>		<p><b>The students will:</b>  <b>11.0</b> Students compute the variance and the standard deviation of a distribution of data.    <b>17.0</b> Students determine confidence intervals for a simple random sample from a normal distribution of data and determine the sample size required for a desired margin of error.  <b>18.0</b> Students determine the <i>P</i>-value for a statistic for a simple random sample from a normal distribution.</p>	
<b>Unit/Topic/Lesson</b> <b>UNIT SEVEN</b> <b>Hypothesis Testing</b>		<b>Unit/Topic/Lesson</b> <b>UNIT SEVEN</b> <b>Hypothesis Testing</b>	
<ol style="list-style-type: none"> <li>Testing a Claim About a Mean: Large Samples</li> <li>Testing a Claim About a Mean: Small Samples</li> </ol>		<ol style="list-style-type: none"> <li>Testing a Claim About a Proportion</li> <li>Testing a Claim About a Standard Deviation</li> <li>Testing a Claim About a Variance</li> </ol>	
<b>Mission and Expectations</b>		<b>Mission and Expectations</b>	
<ol style="list-style-type: none"> <li>Critical Thinking Skills</li> <li>Problem Solving Skills</li> <li>Test Taking Skills</li> </ol>		<ol style="list-style-type: none"> <li>Critical Thinking Skills</li> <li>Problem Solving Skills</li> <li>Test Taking Skills</li> </ol>	
<b>Objectives</b>	<b>Essential Question</b>	<b>Objectives</b>	<b>Essential Question</b>
<ol style="list-style-type: none"> <li>To understand how to test about a mean with large samples.</li> <li>To understand how to test about a mean with small samples.</li> </ol>	How do we test a claim about mean?	<ol style="list-style-type: none"> <li>To understand how test about a proportion.</li> <li>To understand how test about a standard deviation.</li> <li>To understand how test about a variance.</li> </ol>	How do you test a claim about a proportion, standard deviation, or variance?
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>Chapter Seven lessons</li> <li>Chapter Seven exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>	<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>Chapter Seven lessons</li> <li>Chapter Seven exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>
<b>Evaluation/Activities</b>	<b>Completion date:</b>	<b>Evaluation/Activities</b>	<b>Completion date:</b>
<p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.  <b>Test:</b> On the concepts involving Hypothesis Testing.</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 17		Week 18	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<p><i>The students will:</i>  <b>11.0</b> Students compute the variance and the standard deviation of a distribution of data.  <b>17.0</b> Students determine confidence intervals for a simple random sample from a normal distribution of data and determine the sample size required for a desired margin of error.  <b>18.0</b> Students determine the <i>P</i>-value for a statistic for a simple random sample from a normal distribution.</p>		<p><i>The students will:</i>  <b>11.0</b> Students compute the variance and the standard deviation of a distribution of data.  <b>17.0</b> Students determine confidence intervals for a simple random sample from a normal distribution of data and determine the sample size required for a desired margin of error.  <b>18.0</b> Students determine the <i>P</i>-value for a statistic for a simple random sample from a normal distribution.</p>	
<b>Unit/Topic/Lesson</b> <b>UNIT EIGHT</b> <b>Inferences from Two Samples</b>		<b>Unit/Topic/Lesson</b> <b>UNIT EIGHT</b> <b>Inferences from Two Samples</b>	
<ol style="list-style-type: none"> <li>1. Introduction to Inferences from Two Samples</li> <li>2. Inferences About Two Samples</li> <li>3. Inferences About Two Samples Independent and Large Samples</li> </ol>		<ol style="list-style-type: none"> <li>1. Inferences About Two Means</li> <li>2. Inferences About Matched Pairs</li> </ol>	
<b>Mission and Expectations</b>		<b>Mission and Expectations</b>	
<ol style="list-style-type: none"> <li>1. <i>Critical Thinking Skills</i></li> <li>2. <i>Problem Solving Skills</i></li> <li>3. <i>Test Taking Skills</i></li> </ol>		<ol style="list-style-type: none"> <li>1. <i>Critical Thinking Skills</i></li> <li>2. <i>Problem Solving Skills</i></li> <li>3. <i>Test Taking Skills</i></li> </ol>	
<b>Objectives</b>	<b>Essential Question</b>	<b>Objectives</b>	<b>Essential Question</b>
<ol style="list-style-type: none"> <li>1. To understand what makes two samples independent.</li> <li>2. To understand inference about two means that are independent and from large samples.</li> </ol>	<p>How do we infer about the population given two samples that are independent and large?</p>	<ol style="list-style-type: none"> <li>1. To understand what makes two samples matched pairs.</li> <li>2. To understand inference about two means if they are matched pairs.</li> </ol>	<p>What are matched pairs and how do we use them to infer about the population?</p>
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>1. Chapter Eight lessons</li> <li>2. Chapter Eight exercises</li> <li>3. Teacher Made Worksheets</li> <li>4. Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>1. PowerPoint Presentations</li> <li>2. Test Bank CD</li> <li>3. Data Bank Disk for Data Manipulation</li> <li>4. Internet Resources</li> </ol>	<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>1. Chapter Eight lessons</li> <li>2. Chapter Eight exercises</li> <li>3. Teacher Made Worksheets</li> <li>4. Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>1. PowerPoint Presentations</li> <li>2. Test Bank CD</li> <li>3. Data Bank Disk for Data Manipulation</li> <li>4. Internet Resources</li> </ol>
<b>Evaluation/Activities</b>	<b>Completion date:</b>	<b>Evaluation/Activities</b>	<b>Completion date:</b>
<p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 19		Week 20	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<p><i>The students will:</i>  <b>11.0</b> Students compute the variance and the standard deviation of a distribution of data.  <b>18.0</b> Students determine the <i>P</i>-value for a statistic for a simple random sample from a normal distribution.</p>		<p><i>The students will:</i>  <b>13.0</b> Students know what the <i>correlation coefficient of two variables</i> means and are familiar with the coefficient's properties.</p>	
<b>Unit/Topic/Lesson</b> <b>UNIT EIGHT</b> <b>Inferences from Two Samples</b>		<b>Unit/Topic/Lesson</b> <b>UNIT NINE</b> <b>Correlation and Regression</b>	
<ol style="list-style-type: none"> <li>1. Inferences About Two Proportions</li> <li>2. Review of Inferences</li> </ol>		<ol style="list-style-type: none"> <li>1. Introduction and Overview of Correlation and Regression</li> <li>2. Correlation</li> </ol>	
<b>Mission and Expectations</b>		<b>Mission and Expectations</b>	
<ol style="list-style-type: none"> <li>1. Critical Thinking Skills</li> <li>2. Problem Solving Skills</li> <li>3. Test Taking Skills</li> </ol>		<ol style="list-style-type: none"> <li>1. Critical Thinking Skills</li> <li>2. Problem Solving Skills</li> <li>3. Test Taking Skills</li> </ol>	
<b>Objectives</b>	<b>Essential Question</b>	<b>Objectives</b>	<b>Essential Question</b>
<ol style="list-style-type: none"> <li>1. To understand inference about two proportions.</li> <li>2. To review all concepts involving inference.</li> </ol>	<p>How do we predict proportions for the population given two proportions from two different samples?</p>	<ol style="list-style-type: none"> <li>1. To understand correlation.</li> <li>2. To understand to plot data.</li> <li>3. To be able to read a scatter plot.</li> </ol>	<p>What is correlation?</p>
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<i>Essentials of Statistics ©2002</i> <ol style="list-style-type: none"> <li>1. Chapter Eight lessons</li> <li>2. Chapter Eight exercises</li> <li>3. Teacher Made Worksheets</li> <li>4. Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics ©2002</i> <ol style="list-style-type: none"> <li>1. PowerPoint Presentations</li> <li>2. Test Bank CD</li> <li>3. Data Bank Disk for Data Manipulation</li> <li>4. Internet Resources</li> </ol>	<i>Essentials of Statistics ©2002</i> <ol style="list-style-type: none"> <li>1. Chapter Nine lessons</li> <li>2. Chapter Nine exercises</li> <li>3. Teacher Made Worksheets</li> <li>4. Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics ©2002</i> <ol style="list-style-type: none"> <li>1. PowerPoint Presentations</li> <li>2. Test Bank CD</li> <li>3. Data Bank Disk for Data Manipulation</li> <li>4. Internet Resources</li> </ol>
<b>Evaluation/Activities</b>		<b>Evaluation/Activities</b>	
<p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.  <b>Test:</b> On the concepts involving Inferences from Two Samples.</p>	<p><b>Completion date:</b>  <b>Completed by:</b>  <b>Comments:</b></p>	<p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completion date:</b>  <b>Completed by:</b>  <b>Comments:</b></p>

Week 21		Week 22	
<p align="center"><b>Performance Standards</b></p> <p><i>The students will:</i>  <b>6.0</b> Students know the definition of the <i>variance of a discrete random variable</i> and can determine the variance for a particular discrete random variable.  <b>12.0</b> Students find the line of best fit to a given distribution of data by using least squares regression.</p>		<p align="center"><b>Performance Standards</b></p> <p><i>The students will:</i>  <b>8.0</b> Students determine the mean and the standard deviation of a normally distributed random variable.  <b>15.0</b> Students are familiar with the notions of a statistic of a distribution of values, of the sampling distribution of a statistic, and of the variability of a statistic.</p>	
<p align="center"><b>Unit/Topic/Lesson</b>  <b>UNIT NINE</b>  <b>Correlation and Regression</b></p> <ol style="list-style-type: none"> <li>Regression</li> <li>Linear Regression</li> <li>Quadratic Regression</li> <li>Exponential Regression</li> </ol>		<p align="center"><b>Unit/Topic/Lesson</b>  <b>UNIT NINE</b>  <b>Correlation and Regression</b></p> <ol style="list-style-type: none"> <li>Variations and Prediction Intervals</li> <li>Rank Correlation</li> <li>Percentiles</li> <li>Deciles</li> </ol>	
<p align="center"><b>Mission and Expectations</b></p> <p><i>1. Critical Thinking Skills      2. Problem Solving Skills      3. Test Taking Skills</i></p>		<p align="center"><b>Mission and Expectations</b></p> <p><i>1. Critical Thinking Skills      2. Problem Solving Skills      3. Test Taking Skills</i></p>	
<p align="center"><b>Objectives</b></p> <ol style="list-style-type: none"> <li>To understand the concept of regression.</li> <li>To intercept a scatter plot by matching the correct function to the correlation.</li> </ol>	<p align="center"><b>Essential Question</b></p> <p>How do we fit the correct function a given scatter plot?</p>	<p align="center"><b>Objectives</b></p> <ol style="list-style-type: none"> <li>To understand variation.</li> <li>To understand prediction intervals.</li> <li>To understand rank correlation.</li> <li>To work with percentiles and deciles.</li> </ol>	<p align="center"><b>Essential Question</b></p> <p>What is the importance of rank correlation?</p>
<p align="center"><b>Teacher Resources</b>  <i>Essentials of Statistics ©2002</i></p> <ol style="list-style-type: none"> <li>Chapter Nine lessons</li> <li>Chapter Nine exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<p align="center"><b>Media Resources</b>  <i>Essentials of Statistics ©2002</i></p> <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>	<p align="center"><b>Teacher Resources</b>  <i>Essentials of Statistics ©2002</i></p> <ol style="list-style-type: none"> <li>Chapter Nine lessons</li> <li>Chapter Nine exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<p align="center"><b>Media Resources</b>  <i>Essentials of Statistics ©2002</i></p> <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>
<p align="center"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p align="center"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.  <b>Test:</b> On the concepts involving Correlation and Regression.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 23		Week 24	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<p><b>The students will:</b>  <b>19.0</b> Students are familiar with the <i>chi</i>-square distribution and <i>chi</i>-square test and understand their uses.</p>		<p><b>The students will:</b>  <b>19.0</b> Students are familiar with the <i>chi</i>-square distribution and <i>chi</i>-square test and understand their uses.</p>	
<b>Unit/Topic/Lesson</b> <b>UNIT TEN</b> <b>Chi-Square and Analysis of Variance</b>		<b>Unit/Topic/Lesson</b> <b>UNIT TEN</b> <b>Chi-Square and Analysis of Variance</b>	
<ol style="list-style-type: none"> <li>Introduction and Overview of Chi-Square Analysis of Variance</li> <li>Multinomial Experiments: Goodness-of-Fit</li> </ol>		<ol style="list-style-type: none"> <li>Contingency Tables</li> <li>Independence and Homogeneity</li> <li>Two-Way Frequency Tables</li> <li>Test for Independence</li> </ol>	
<b>Mission and Expectations</b>		<b>Mission and Expectations</b>	
<ol style="list-style-type: none"> <li>Critical Thinking Skills</li> <li>Problem Solving Skills</li> <li>Test Taking Skills</li> </ol>		<ol style="list-style-type: none"> <li>Critical Thinking Skills</li> <li>Problem Solving Skills</li> <li>Test Taking Skills</li> </ol>	
<b>Objectives</b>	<b>Essential Question</b>	<b>Objectives</b>	<b>Essential Question</b>
<ol style="list-style-type: none"> <li>To understand Chi-square distribution.</li> <li>To understand the goodness-of-fit.</li> <li>To understand the degrees of freedom for Chi-square distribution.</li> </ol>	<p>What is Chi-squared distribution and what is meant by goodness-of-fit?</p>	<ol style="list-style-type: none"> <li>To understand Chi-square distribution for contingency tables.</li> <li>To understand homogeneity and independence.</li> </ol>	<p>What is contingency tables and how to we test for independence and homogeneity?</p>
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>Chapter Ten lessons</li> <li>Chapter Ten exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>	<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>Chapter Ten lessons</li> <li>Chapter Ten exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<i>Essentials of Statistics</i> ©2002 <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>
<b>Evaluation/Activities</b>	<b>Completion date:</b>	<b>Evaluation/Activities</b>	<b>Completion date:</b>
<p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 25		Week 26	
<p align="center"><b>Performance Standards</b></p> <p><i>The students will:</i>  <b>19.0</b> Students are familiar with the <i>chi</i>-square distribution and <i>chi</i>-square test and understand their uses.</p>		<p align="center"><b>Performance Standards</b></p> <p><i>The students will:</i>  <b>1.0</b> Students solve probability problems with finite sample spaces by using the rules for addition, multiplication, and complementation for probability distributions and understand the simplifications that arise with independent events.</p>	
<p align="center"><b>Unit/Topic/Lesson</b>  <b>UNIT TEN</b>  <b>Chi-Square and Analysis of Variance</b></p> <ol style="list-style-type: none"> <li>Analysis of Variance</li> <li>Test of Homogeneity</li> <li>Degrees of Freedom</li> </ol>		<p align="center"><b>Unit/Topic/Lesson</b>  <b>UNIT ELEVEN</b>  <b>Introduction to Probability</b></p> <ol style="list-style-type: none"> <li>Theoretical Probability</li> <li>Fundamental Counting Principle</li> <li>Sample Space and Events</li> </ol>	
<p align="center"><b>Mission and Expectations</b></p> <p><i>1. Critical Thinking Skills      2. Problem Solving Skills      3. Test Taking Skills</i></p>		<p align="center"><b>Mission and Expectations</b></p> <p><i>1. Critical Thinking Skills      2. Problem Solving Skills      3. Test Taking Skills</i></p>	
<p align="center"><b>Objectives</b></p> <ol style="list-style-type: none"> <li>To be able to analysis variance.</li> <li>To understand when a collected data set is homogeneous.</li> </ol>	<p align="center"><b>Essential Question</b></p> <p>How do we analyze variance?</p>	<p align="center"><b>Objectives</b></p> <ol style="list-style-type: none"> <li>To find the theoretical probability of an event.</li> <li>To apply the Fundamental Counting Principle.</li> </ol>	<p align="center"><b>Essential Question</b></p> <p>How do you use the Fundamental Counting Principle to find theoretical probability?</p>
<p align="center"><b>Teacher Resources</b></p> <p><i>Essentials of Statistics ©2002</i></p> <ol style="list-style-type: none"> <li>Chapter Ten lessons</li> <li>Chapter Ten exercises</li> <li>Teacher Made Worksheets</li> <li>Teacher Made Assessments</li> </ol>	<p align="center"><b>Media Resources</b></p> <p><i>Essentials of Statistics ©2002</i></p> <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Test Bank CD</li> <li>Data Bank Disk for Data Manipulation</li> <li>Internet Resources</li> </ol>	<p align="center"><b>Teacher Resources</b></p> <ol style="list-style-type: none"> <li>Teacher Made lessons</li> <li>Teacher Made activities</li> <li>Holt <i>Algebra 2</i> ©2004 Chapters 10 and 12</li> <li><i>Discrete Mathematics Through Applications</i> ©1994</li> </ol>	<p align="center"><b>Media Resources</b></p> <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Internet Activities</li> <li>TI-nspire Graphing Calculators</li> </ol>
<p align="center"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.  <b>Test:</b> On the concepts involving Chi-Square and Analysis of Variance.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p align="center"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 27		Week 28	
<p align="center"><b>Performance Standards</b></p> <p><i>The students will:</i>  <b>1.0</b> Students solve probability problems with finite sample spaces by using the rules for addition, multiplication, and complementation for probability distributions and understand the simplifications that arise with independent events.</p>		<p align="center"><b>Performance Standards</b></p> <p><i>The students will:</i>  <b>1.0</b> Students solve probability problems with finite sample spaces by using the rules for addition, multiplication, and complementation for probability distributions and understand the simplifications that arise with independent events.  <b>2.0</b> Students know the definition of <i>conditional probability</i> and use it to solve for probabilities in finite sample spaces.</p>	
<p align="center"><b>Unit/Topic/Lesson</b>  <b>UNIT ELEVEN</b>  <b>Introduction to Probability</b></p> <ol style="list-style-type: none"> <li>Permutations</li> <li>Combinations</li> </ol>		<p align="center"><b>Unit/Topic/Lesson</b>  <b>UNIT ELEVEN</b>  <b>Introduction to Probability</b></p> <ol style="list-style-type: none"> <li>Using Addition with Probability</li> <li>Independent Events</li> <li>Dependent Events</li> <li>Conditional Probability</li> </ol>	
<p align="center"><b>Mission and Expectations</b></p> <p>1. <i>Critical Thinking Skills</i>      2. <i>Problem Solving Skills</i>      3. <i>Test Taking Skills</i></p>		<p align="center"><b>Mission and Expectations</b></p> <p>1. <i>Critical Thinking Skills</i>      2. <i>Problem Solving Skills</i>      3. <i>Test Taking Skills</i></p>	
<p align="center"><b>Objectives</b></p> <ol style="list-style-type: none"> <li>To solve problems involving linear permutations of distinct objects.</li> <li>To solve problems involving linear permutations of indistinguishable objects.</li> <li>To solve problems involving linear combinations of distinct objects.</li> <li>To solve problems involving linear combinations of indistinguishable objects.</li> </ol>	<p align="center"><b>Essential Question</b></p> <p>How do you distinguish whether a particular problem is a combination or permutation model?</p>	<p align="center"><b>Objectives</b></p> <ol style="list-style-type: none"> <li>To understand how to use the addition property with probability.</li> <li>To determine whether an event is dependent or independent.</li> <li>To find probability with a given condition.</li> </ol>	<p align="center"><b>Essential Question</b></p> <p>How do you calculate probability for dependent and independent events, including conditional probability?</p>
<p align="center"><b>Teacher Resources</b></p> <ol style="list-style-type: none"> <li>Teacher Made lessons</li> <li>Teacher Made activities</li> <li>Holt <i>Algebra 2</i> ©2004 Chapters 10 and 12</li> <li><i>Discrete Mathematics Through Applications</i> ©1994</li> </ol>	<p align="center"><b>Media Resources</b></p> <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Internet Activities</li> <li>TI-nspire Graphing Calculators</li> </ol>	<p align="center"><b>Teacher Resources</b></p> <ol style="list-style-type: none"> <li>Teacher Made lessons</li> <li>Teacher Made activities</li> <li>Holt <i>Algebra 2</i> ©2004 Chapters 10 and 12</li> <li><i>Discrete Mathematics Through Applications</i> ©1994</li> </ol>	<p align="center"><b>Media Resources</b></p> <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Internet Activities</li> <li>TI-nspire Graphing Calculators</li> </ol>
<p align="center"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p align="center"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 29		Week 30	
<p style="text-align: center;"><b>Performance Standards</b></p> <p><i>The students will:</i>  <b>1.0</b> Students solve probability problems with finite sample spaces by using the rules for addition, multiplication, and complementation for probability distributions and understand the simplifications that arise with independent events.  <b>2.0</b> Students know the definition of <i>conditional probability</i> and use it to solve for probabilities in finite sample spaces.</p>		<p style="text-align: center;"><b>Performance Standards</b></p> <p><i>The students will:</i>  <b>1.0</b> Students solve probability problems with finite sample spaces by using the rules for addition, multiplication, and complementation for probability distributions and understand the simplifications that arise with independent events.</p>	
<p style="text-align: center;"><b>Unit/Topic/Lesson</b>  <b>UNIT ELEVEN</b>  <b>Introduction to Probability</b></p> <ol style="list-style-type: none"> <li>Dependent Events</li> <li>Conditional Probability</li> <li>Experimental Probability and Simulation</li> </ol>		<p style="text-align: center;"><b>Unit/Topic/Lesson</b>  <b>UNIT TWELVE</b>  <b>Pascal's Triangle</b></p> <ol style="list-style-type: none"> <li>Introduction to Pascal's Triangle</li> <li>Probability Associated with Pascal's Triangle</li> </ol>	
<p style="text-align: center;"><b>Mission and Expectations</b></p> <p>1. <i>Critical Thinking Skills</i>    2. <i>Problem Solving Skills</i>    3. <i>Test Taking Skills</i></p>		<p style="text-align: center;"><b>Mission and Expectations</b></p> <p>1. <i>Critical Thinking Skills</i>    2. <i>Problem Solving Skills</i>    3. <i>Test Taking Skills</i></p>	
<p style="text-align: center;"><b>Objectives</b></p> <ol style="list-style-type: none"> <li>To find probability with a given condition.</li> <li>To distinguish between experimental and theoretical probability.</li> </ol>	<p style="text-align: center;"><b>Essential Question</b></p> <p>How do you use simulation to prove an experimental probability?</p>	<p style="text-align: center;"><b>Objectives</b></p> <ol style="list-style-type: none"> <li>To understand the makeup of Pascal's Triangle.</li> <li>To understand how to use Pascal's Triangle to calculate probabilities.</li> </ol>	<p style="text-align: center;"><b>Essential Question</b></p> <p>How do you use Pascal's Triangle to find probabilities?</p>
<p style="text-align: center;"><b>Teacher Resources</b></p> <ol style="list-style-type: none"> <li>Teacher Made lessons</li> <li>Teacher Made activities</li> <li>Holt <i>Algebra 2</i> ©2004 Chapters 10 and 12</li> <li><i>Discrete Mathematics Through Applications</i> ©1994</li> </ol>	<p style="text-align: center;"><b>Media Resources</b></p> <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Internet Activities</li> <li>TI-nspire Graphing Calculators</li> </ol>	<p style="text-align: center;"><b>Teacher Resources</b></p> <ol style="list-style-type: none"> <li>Teacher Made lessons</li> <li>Teacher Made activities</li> <li>Holt <i>Algebra 2</i> ©2004 Chapters 10 and 12</li> <li><i>Discrete Mathematics Through Applications</i> ©1994</li> </ol>	<p style="text-align: center;"><b>Media Resources</b></p> <ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Internet Activities</li> <li>TI-nspire Graphing Calculators</li> </ol>
<p style="text-align: center;"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.  <b>Test:</b> On the concepts involving the Introduction to Probability.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p style="text-align: center;"><b>Evaluation/Activities</b></p> <p><b>Homework:</b> To be given daily on each introduced topic  <b>Review:</b> All weekly concepts.  <b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>

Week 31		Week 32	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<p><b>The students will:</b>            1.0 Students solve probability problems with finite sample spaces by using the rules for addition, multiplication, and complementation for probability distributions and understand the simplifications that arise with independent events.</p>		<p><b>The students will:</b>            7.0 Students demonstrate an understanding of the standard distributions (normal, binomial, and exponential) and can use the distributions to solve for events in problems in which the distribution belongs to those families.</p>	
<b>Unit/Topic/Lesson</b> <b>UNIT TWELVE</b> <b>Pascal's Triangle</b>		<b>Unit/Topic/Lesson</b> <b>UNIT THIRTEEN</b> <b>Binomial Theorem</b>	
<ol style="list-style-type: none"> <li>Finding Entries in Pascal's Triangle</li> <li>Combination Associated with Pascal's Triangle</li> <li>Probabilities Associated with Pascal's Triangle</li> </ol>		<ol style="list-style-type: none"> <li>Calculating Probabilities Using the Binomial Theorem</li> <li>Expand <math>(x + y)^n</math> using Binomial Theorem</li> </ol>	
<b>Mission and Expectations</b>		<b>Mission and Expectations</b>	
<ol style="list-style-type: none"> <li>Critical Thinking Skills</li> <li>Problem Solving Skills</li> <li>Test Taking Skills</li> </ol>		<ol style="list-style-type: none"> <li>Critical Thinking Skills</li> <li>Problem Solving Skills</li> <li>Test Taking Skills</li> </ol>	
<b>Objectives</b>	<b>Essential Question</b>	<b>Objectives</b>	<b>Essential Question</b>
<ol style="list-style-type: none"> <li>To understand how to find combinations of an event in Pascal's Triangle.</li> <li>To locate any entry in Pascal's Triangle.</li> </ol>	How do entries in Pascal's Triangle relate to combinations of an event?	<ol style="list-style-type: none"> <li>To understand to use the Binomial Theorem to calculate probability.</li> <li>To expand binomials using the Binomial Theorem.</li> </ol>	How is the Binomial Theorem helpful in calculating a probability?
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<ol style="list-style-type: none"> <li>Teacher Made lessons</li> <li>Teacher Made activities</li> <li>Holt <i>Algebra 2</i> ©2004 Chapters 10 and 12</li> <li><i>Discrete Mathematics Through Applications</i> ©1994</li> </ol>	<ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Internet Activities</li> <li>TI-nspire Graphing Calculators</li> </ol>	<ol style="list-style-type: none"> <li>Teacher Made lessons</li> <li>Teacher Made activities</li> <li>Holt <i>Algebra 2</i> ©2004 Chapters 10 and 12</li> <li><i>Discrete Mathematics Through Applications</i> ©1994</li> </ol>	<ol style="list-style-type: none"> <li>PowerPoint Presentations</li> <li>Internet Activities</li> <li>TI-nspire Graphing Calculators</li> </ol>
<b>Evaluation/Activities</b>	<b>Completion date:</b>	<b>Evaluation/Activities</b>	<b>Completion date:</b>
<p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p> <p><b>Test:</b> On the concepts involving Pascal's Triangle.</p>	<b>Completed by:</b>	<p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p> <p><b>Test:</b> On the concepts involving the Binomial Theorem.</p>	<b>Comments:</b>

Week 33		Week 34	
<b>Performance Standards</b>		<b>Performance Standards</b>	
<p><b>The students will:</b>  <b>14.0</b> Students organize and describe distributions of data by using a number of different methods, including frequency tables, histograms, standard line graphs and bar graphs, stem-and-leaf displays, scatterplots, and box-and-whisker plots.</p>		<p><b>The students will:</b>  <b>14.0</b> Students organize and describe distributions of data by using a number of different methods, including frequency tables, histograms, standard line graphs and bar graphs, stem-and-leaf displays, scatterplots, and box-and-whisker plots.</p>	
<b>Unit/Topic/Lesson</b> <b>UNIT FOURTEEN</b> <b>Probability in the Real World</b>		<b>Unit/Topic/Lesson</b> <b>UNIT FOURTEEN</b> <b>Probability in the Real World</b>	
<ol style="list-style-type: none"> <li>1. Winning the Lottery</li> <li>2. Matching Birthday</li> <li>3. Accidental Death</li> </ol>		<ol style="list-style-type: none"> <li>1. Game Theory</li> <li>2. Probability of Wining in A Game</li> <li>3. Election Theory</li> </ol>	
<b>Mission and Expectations</b>		<b>Mission and Expectations</b>	
<ol style="list-style-type: none"> <li>1. <i>Critical Thinking Skills</i></li> <li>2. <i>Problem Solving Skills</i></li> <li>3. <i>Test Taking Skills</i></li> </ol>		<ol style="list-style-type: none"> <li>1. <i>Critical Thinking Skills</i></li> <li>2. <i>Problem Solving Skills</i></li> <li>3. <i>Test Taking Skills</i></li> </ol>	
<b>Objectives</b>	<b>Essential Question</b>	<b>Objectives</b>	<b>Essential Question</b>
<ol style="list-style-type: none"> <li>1. To use probability to determine the likelihood of an event in a real world model.</li> <li>2. To calculate the probability of a real world event occurring in theory.</li> </ol>	<p>How do you use probability to calculate outcomes of real world problems?</p>	<ol style="list-style-type: none"> <li>1. To use probability as it relates to game theory.</li> <li>2. To use probability as it relates to election theory.</li> </ol>	<p>How does a casino make money without the fear of losing their principle?</p>
<b>Teacher Resources</b>	<b>Media Resources</b>	<b>Teacher Resources</b>	<b>Media Resources</b>
<ol style="list-style-type: none"> <li>1. Teacher Made lessons</li> <li>2. Teacher Made activities</li> <li>3. Holt <i>Algebra 2</i> ©2004 Chapters 10 and 12</li> <li>4. <i>Discrete Mathematics Through Applications</i> ©1994</li> </ol>	<ol style="list-style-type: none"> <li>1. PowerPoint Presentations</li> <li>2. Internet Activities</li> <li>3. TI-nspire Graphing Calculators</li> </ol>	<ol style="list-style-type: none"> <li>1. Teacher Made lessons</li> <li>2. Teacher Made activities</li> <li>3. Holt <i>Algebra 2</i> ©2004 Chapters 10 and 12</li> <li>4. <i>Discrete Mathematics Through Applications</i> ©1994</li> </ol>	<ol style="list-style-type: none"> <li>1. PowerPoint Presentations</li> <li>2. Internet Activities</li> <li>3. TI-nspire Graphing Calculators</li> </ol>
<b>Evaluation/Activities</b>		<b>Evaluation/Activities</b>	
<p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>	<p><b>Homework:</b> To be given daily on each introduced topic</p> <p><b>Review:</b> All weekly concepts.</p> <p><b>Quiz:</b> Assessments given as warranted by the curriculum.</p> <p><b>Test:</b> On the concepts involving Probability in the Real World.</p>	<p><b>Completion date:</b></p> <p><b>Completed by:</b></p> <p><b>Comments:</b></p>