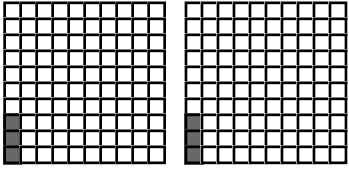
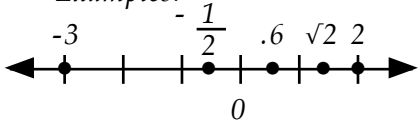
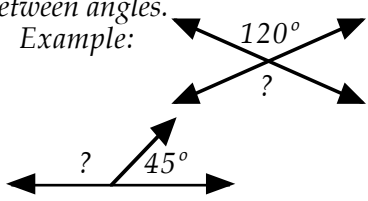


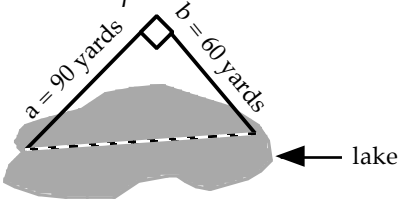
**Alabama**  
**Curricular Standards**  
**Mathematics - Grade 8**  
**Correlations with Gourmet Curriculum Press, Inc.®**  
**1.800.900.2290**

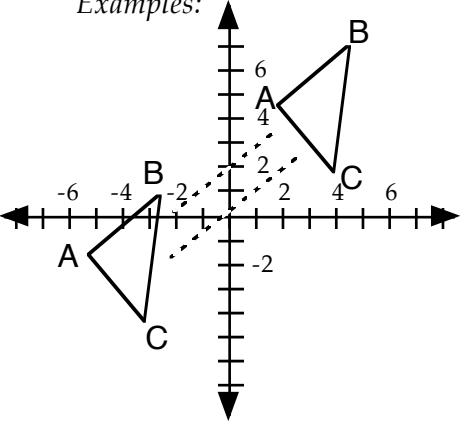
<b>Benchmark Number</b>	<b>Benchmark • Instructional Target</b>	<b>Gourmet Resource</b>	<b>Taught</b>	<b>Tested</b>
<b>Number Sense, Number Systems, Number Theory</b>				
1 Stanford 9	<ul style="list-style-type: none"> <li>Demonstrate proficiency in performing basic operations on rational numbers.</li> </ul>	Appetizers 6 A; 7 A; 8 A; 9 A; (Addition); (Subtraction); (Multiplication); (Division)		
2 Stanford 9	<ul style="list-style-type: none"> <li>Demonstrate proficiency in converting rational numbers between standard notation and scientific notation.</li> </ul>	Appetizers 1 A; (Number Concepts)		
3 Stanford 9	<ul style="list-style-type: none"> <li>Demonstrate proficiency in evaluating rational number expressions using the order of operations.</li> </ul>	Appetizers 2 A; (Mathematical Relations)		
4 Stanford 9	<ul style="list-style-type: none"> <li>Identify alternative representations of rational numbers. Example:</li> </ul>  $= 1 \frac{3}{100} = \frac{103}{100} = 1.03 = 103\%$	Appetizers 1 C; (Number Concepts)		
5	<ul style="list-style-type: none"> <li>Demonstrate proficiency in determining least common multiples and greatest common factors.</li> </ul>	7th Appetizers 1 F; (Number Concepts)		
6 Stanford 9	<ul style="list-style-type: none"> <li>Apply the laws of exponents to simplify expressions containing integral exponents.</li> </ul>	Appetizers 1 B; (Number Concepts)		
7 Stanford 9	<ul style="list-style-type: none"> <li>Find square roots of rational numbers.</li> </ul>	7th Appetizers 1 G; (Number Concepts)		
8 Stanford 9	<ul style="list-style-type: none"> <li>Compare and order real numbers.</li> </ul>	Appetizers 1 C; (Number Concepts)		

<b>Benchmark Number</b>	<b>Benchmark</b> • <b>Instructional Target</b>	<b>Gourmet Resource</b>	<b>Taught</b>	<b>Tested</b>
9 Stanford 9	<ul style="list-style-type: none"> <li>Graph real numbers on a number line. Examples:   </li> </ul>	<b>Appetizers 2 D; 12 B;</b> <b>(Mathematical Relations);</b> <b>(Mathematical Representation)</b>		
10 Stanford 9	<ul style="list-style-type: none"> <li>Demonstrate proficiency using estimation techniques in problem solving related to real-life situations. <ul style="list-style-type: none"> <li>Rounding</li> <li>Front-end Example:  <math>1\frac{7}{12} \rightarrow 1\frac{7}{12} \approx \frac{1}{2}</math>  <math>1\frac{5}{8} \rightarrow 1\frac{5}{8} \approx \frac{1}{2}</math> </li> <li>Compatible numbers Example:  <math>3.02 \times 7.3 \approx 3 \times 7</math> or <math>(21)</math>  <math>(90)</math>  <math>6\sqrt{550} \approx 6\sqrt{540}</math> </li> <li>Clustering Example: \$1.78 + \$1.85 + \$2.12 All of the addends are close to the same dollar amount --- \$2. Therefore, \$2 x 3 = \$6.</li> </ul> </li> </ul>	<b>Appetizers 10 A;</b> <b>(Estimation)</b>		
11 Stanford 9	<ul style="list-style-type: none"> <li>Use problem-solving strategies effectively. <ul style="list-style-type: none"> <li>Using objects</li> <li>Drawing a picture</li> <li>Using guess and check</li> <li>Making an organized list</li> <li>Writing an equation</li> <li>Solving a simpler problem</li> <li>Making a table or chart</li> <li>Looking for a pattern</li> <li>Using logical reasoning</li> <li>Working backwards</li> </ul> </li> </ul>	<b>Appetizers 11 A; 12 A; 13 A,</b> <b>B, &amp; C; (Problem Solving);</b> <b>(Mathematical Representation);</b> <b>(Reasonableness)</b>		

<b>Benchmark Number</b>	<b>Benchmark</b> • <b>Instructional Target</b>	<b>Gourmet Resource</b>	<b>Taught</b>	<b>Tested</b>
12 Stanford 9	• <i>Identify missing information in problem-solving situations.</i>	<b>Appetizers 2 B; 11 A; 13 C; (Mathematical Relations); (Problem Solving); (Reasonableness)</b>		
13 Stanford 9	• <i>Solve problems with ratios and proportions.</i>	<b>Appetizers 2 D; (Mathematical Relations)</b>		
14 Stanford 9	• <i>Recognize and use absolute value of real numbers.</i>	<b>Appetizers 2 C; (Mathematical Relations)</b>		
<b>Geometry, Spatial Sense, Measurement</b>				
15	• <i>Identify the relationships between two- and three-dimensional geometric figures.</i> <i>Examples: Rectangular prisms are composed of rectangles. Pyramids are composed of triangles and a rectangle.</i>	<b>Appetizers 3 B; (Geometry)</b>		
16 Stanford 9	• <i>Demonstrate proficiency in converting from one measurement to another within the same system.</i> - Customary - Metric	<b>Appetizers 4 B &amp; C; (Measurement)</b>		
17 Stanford 9	• <i>Solve measurement problems by using mental math, paper and pencil, and estimation techniques as well as appropriate units of measure.</i> - Time - Distance and length - Rate - Money - Weight and mass - Perimeter and circumference - Temperature - Area and surface area - Volume	<b>Appetizers 4 B, C, D, &amp; E; (Measurement)</b>		

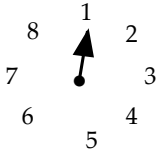
<b>Benchmark Number</b>	<b>Benchmark</b> • <b>Instructional Target</b>	<b>Gourmet Resource</b>	<b>Taught</b>	<b>Tested</b>
18 Stanford 9	<ul style="list-style-type: none"> <li>• Demonstrate proficiency in measuring to find perimeter, area, and volume using customary and metric units.</li> </ul>	Appetizers 4 B, C, D, E, & F; (Measurement)		
19 Stanford 9	<ul style="list-style-type: none"> <li>• Produce measurements indirectly from similar geometric figures and drawings.</li> </ul>	Appetizers 3 E & H; (Geometry)		
20	<ul style="list-style-type: none"> <li>• Demonstrate proficiency in classifying angles according to their characteristics.               <ul style="list-style-type: none"> <li>- Right, acute, obtuse, straight</li> <li>- Adjacent, vertical</li> <li>- Complementary, Supplementary</li> </ul> </li> </ul>	Appetizers 3 C & G; (Geometry)		
21 Stanford 9	<ul style="list-style-type: none"> <li>• Estimate measures of angles and verify results.</li> </ul>	Appetizers 3 C & E; (Geometry)		
22	<ul style="list-style-type: none"> <li>• Recognize the relationship of angles formed by two parallel lines cut by a transversal.               <ul style="list-style-type: none"> <li>- Alternate interior</li> <li>- Corresponding</li> <li>- Alternate exterior</li> </ul> </li> </ul>	Appetizers 3 F; (Geometry)		
23 Stanford 9	<ul style="list-style-type: none"> <li>• Apply properties of plane and solid geometric figures to solve problems.               <ul style="list-style-type: none"> <li>- Triangles</li> <li>- Quadrilaterals</li> <li>- Regular polygons</li> <li>- Parallel and perpendicular lines</li> <li>- Circles</li> <li>- Rectangular prisms</li> <li>- Pyramids</li> <li>- Cones</li> <li>- Spheres</li> </ul> </li> </ul>	Appetizers 3 A, B, C, & D; (Geometry)		
24	<ul style="list-style-type: none"> <li>• Solve problems using relationships between angles.</li> </ul> <p>Example:</p> 	Appetizers 3 A & E; (Geometry)		

<b>Benchmark Number</b>	<b>Benchmark</b> • <b>Instructional Target</b>	<b>Gourmet Resource</b>	<b>Taught</b>	<b>Tested</b>
25	<ul style="list-style-type: none"> <li>Recognize and use the Pythagorean Theorem. Example:   </li> </ul> <p>Find the distance across the widest part of the lake as depicted by the dotted segment.</p>	Appetizers 3 C & D; (Geometry)		
26	<ul style="list-style-type: none"> <li>Construct geometric figures using a compass and straightedge. <ul style="list-style-type: none"> <li>Perpendicular bisector of a given line segment</li> <li>Angle congruent to a given angle</li> <li>Line segment congruent to a given line segment</li> <li>Congruent triangles</li> <li>A line parallel to a given line through a given point not on the line</li> </ul> </li> </ul>	Appetizers 3 F & G; (Geometry)		
27 Stanford 9	<ul style="list-style-type: none"> <li>Determine measures associated with plane and solid geometric figures using given formulas. <ul style="list-style-type: none"> <li>Perimeter of polygons and irregular figures</li> <li>Circumference of circles</li> <li>Area of circles, polygons, and irregular figures</li> <li>Volume of spheres, prisms, pyramids, cylinders, and cones</li> </ul> </li> </ul>	Appetizers 4 D, E, & F; (Measurement)		
28 Stanford 9	<ul style="list-style-type: none"> <li>Identify components of the Cartesian plane. <ul style="list-style-type: none"> <li>x- and y-axes</li> <li>Origin</li> <li>Coordinates of points (abscissa and ordinate)</li> <li>Quadrants</li> </ul> </li> </ul>	Appetizers 2 C; (Mathematical Relations)		

Benchmark Number	Benchmark • <i>Instructional Target</i>	<i>Gourmet Resource</i>	<i>Taught</i>	<i>Tested</i>										
29 Stanford 9	<ul style="list-style-type: none"> <li>• <i>Explore geometric transformations on the Cartesian plane.</i> <ul style="list-style-type: none"> <li>- <i>Translations</i></li> <li>- <i>Rotations</i></li> <li>- <i>Reflections</i></li> </ul> </li> </ul> <p><i>Examples:</i></p>  <p>Translation of <math>\triangle ABC</math> into <math>\triangle A'B'C'</math>  A (-5, -2)  B (-3, -1)  C (-2, -4)  Find coordinates of the vertices of <math>\triangle A'B'C'</math>.</p>	Appetizers 2 C; (Mathematical Relations)												
30	<ul style="list-style-type: none"> <li>• <i>Use computers and graphing calculators to facilitate understanding of coordinate geometry.</i></li> </ul>													
31	<ul style="list-style-type: none"> <li>• <i>Identify and graph functions on the Cartesian plane.</i>  <i>Examples: <math>y = 2x + 1</math>;</i>  <i><math>f(x) = x^2</math></i></li> </ul>	Appetizers 12 B; (Mathematical Representation)												
<b>Patterns, Functions, Algebra</b>														
32 Stanford 9	<ul style="list-style-type: none"> <li>• <i>Develop an understanding of rules that represent patterns or relationships that are functions.</i>  <i>Example:</i></li> </ul> <table border="1" data-bbox="431 1549 824 1780" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="2" style="text-align: center;">RULE <math>y = 3x</math></td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">y</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">6</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">9</td> </tr> </table>	RULE $y = 3x$		x	y	1	3	2	6	3	9	Appetizers 2 B & F; (Mathematical Relations)		
RULE $y = 3x$														
x	y													
1	3													
2	6													
3	9													

<b>Benchmark Number</b>	<b>Benchmark</b> • <b>Instructional Target</b>	<b>Gourmet Resource</b>	<b>Taught</b>	<b>Tested</b>
33	<ul style="list-style-type: none"> <li>• <i>Develop an understanding of algebraic terms.</i> <ul style="list-style-type: none"> <li>- Variable</li> <li>- Term</li> <li>- Coefficient</li> <li>- Constant</li> <li>- Exponent</li> <li>- Sentence, equation, inequality</li> <li>- Phrase, expression</li> </ul> </li> </ul>	<b>Appetizers 2 F;</b> <b>(Mathematical Relations)</b>		
34 Stanford 9	<ul style="list-style-type: none"> <li>• <i>Simplify and evaluate linear algebraic expressions.</i> <ul style="list-style-type: none"> <li>- Combining like terms</li> <li>- Using laws of exponents restricted to positive integral exponents</li> <li>- Using the distributive property</li> <li>- Using order of operations</li> </ul> </li> </ul>	<b>Appetizers 2 G;</b> <b>(Mathematical Relations)</b>		
35 Stanford 9	<ul style="list-style-type: none"> <li>• <i>Translate verbal phrases and sentences into symbolic notation.</i></li> </ul>	<b>Appetizers 13 B;</b> <b>(Reasonableness)</b>		
36 Stanford 9	<ul style="list-style-type: none"> <li>• <i>Solve linear equations and inequalities.</i></li> </ul>	<b>Appetizers 2 G; 12 B;</b> <b>(Mathematical Relations);</b> <b>(Mathematical Representation)</b>		
37 Stanford 9	<ul style="list-style-type: none"> <li>• <i>Use linear equations and inequalities to solve problems.</i> <i>Examples: proportion problems, percent problems, absolute value problems</i></li> </ul>	<b>Appetizers 2 G; 12 A;</b> <b>(Mathematical Relations);</b> <b>(Mathematical Representation)</b>		
38	<ul style="list-style-type: none"> <li>• <i>Demonstrate proficiency in recognizing the commutative, associative, and identity properties.</i></li> </ul>	<b>Appetizers 2 A;</b> <b>(Mathematical Relations)</b>		
39	<ul style="list-style-type: none"> <li>• <i>Use the properties of rational numbers.</i> <ul style="list-style-type: none"> <li>- Distributive Property</li> <li>- Closure Property</li> <li>- Associative Property</li> <li>- Commutative Property</li> <li>- Identity Property</li> <li>- Inverse Property</li> </ul> </li> </ul>	<b>Appetizers 2 A;</b> <b>(Mathematical Relations)</b>		

<b>Benchmark Number</b>	<b>Benchmark</b> • <b>Instructional Target</b>	<b>Gourmet Resource</b>	<b>Taught</b>	<b>Tested</b>																					
40	• Solve algebraic problems using calculators and computers when appropriate.																								
<b>Probability, Statistics, Discrete Mathematics</b>																									
41 Stanford 9	• Analyze and/or extrapolate data from frequency tables, stem-and-leaf plots, histograms, scattergrams, tally charts, single- and multiple-bar graphs, single- and multiple-line graphs, circle graphs, and published studies.	<b>Appetizers 5 D; 11 E; 12 C; (Probability/Statistics); (Problem Solving); (Mathematical Representation)</b>																							
42 Stanford 9	• Use mean, median, mode, and range to analyze statistical data.	<b>Appetizers 5 C; (Probability/Statistics)</b>																							
43 Stanford 9	• Identify uses and misuses of statistics in everyday life.	<b>Appetizers 11 E; (Problem Solving)</b>																							
44 Stanford 9	• Conduct a statistical study and use a statistical sampling to make a prediction.																								
45 Stanford 9	• Determine possible outcome(s) of an event and compare with experimental outcomes.	<b>Appetizers 5 A &amp; B; 11 E; (Probability/Statistics); (Problem Solving)</b>																							
46 Stanford 9	<p>• Exhibit an understanding of permutations and combinations. Examples:</p> <p><u>Combinations</u></p> <p>Mrs. Kyser must choose two students to attend a meeting. Her choices are Sam, Joe, and Karen. In how many ways can she choose two of the three? List them.</p> <p>Answer: 3 ways - Sam, Joe Sam, Karen Joe, Karen</p> <p><u>Permutations</u></p> <p>John, Sue, and Bob are racing. How many different possibilities are there for first, second, and third place winners? List them.</p> <p>Answer: 6 possibilities</p> <table style="margin-left: 40px;"> <tr> <td><u>1st place</u></td> <td><u>2nd place</u></td> <td><u>3rd place</u></td> </tr> <tr> <td>John</td> <td>Sue</td> <td>Bob</td> </tr> <tr> <td>John</td> <td>Bob</td> <td>Sue</td> </tr> <tr> <td>Sue</td> <td>John</td> <td>Bob</td> </tr> <tr> <td>Sue</td> <td>Bob</td> <td>John</td> </tr> <tr> <td>Bob</td> <td>Sue</td> <td>John</td> </tr> <tr> <td>Bob</td> <td>John</td> <td>Sue</td> </tr> </table>	<u>1st place</u>	<u>2nd place</u>	<u>3rd place</u>	John	Sue	Bob	John	Bob	Sue	Sue	John	Bob	Sue	Bob	John	Bob	Sue	John	Bob	John	Sue	<b>Appetizers 5 A &amp; B; (Probability/Statistics)</b>		
<u>1st place</u>	<u>2nd place</u>	<u>3rd place</u>																							
John	Sue	Bob																							
John	Bob	Sue																							
Sue	John	Bob																							
Sue	Bob	John																							
Bob	Sue	John																							
Bob	John	Sue																							

<b>Benchmark Number</b>	<b>Benchmark</b> • <b>Instructional Target</b>	<b>Gourmet Resource</b>	<b>Taught</b>	<b>Tested</b>
47 Stanford 9	<ul style="list-style-type: none"> <li>Determine the probability of simple events, complementary events, and mutually exclusive events.</li> </ul> <p>Examples:</p>  <p><u>Simple event</u> - Pointer stops on 7. The probability is <math>\frac{1}{8}</math>.</p> <p><u>Mutually exclusive events</u> - Pointer stops on 5 or a shaded wedge. The probability is <math>\frac{1}{8} + \frac{4}{8} = \frac{5}{8}</math>.</p> <p><u>Complementary events</u> - Pointer stops on 2 on the first spin. Pointer does not stop on 2 on the next spin. The probability that the pointer does not stop on 2 is <math>\frac{7}{8}</math>.</p>	<b>Appetizers 5 B; (Probability/Statistics)</b>		
48	<ul style="list-style-type: none"> <li>Recognize and use inductive and deductive reasoning.</li> </ul>	<b>Appetizers 11 E &amp; F; 12 C; 13 C; (Problem Solving); (Mathematical Representation); (Reasonableness)</b>		
49	<ul style="list-style-type: none"> <li>Represent a given set in various ways. <ul style="list-style-type: none"> <li>Roster</li> <li>Rule</li> </ul> </li> </ul>			
50	<ul style="list-style-type: none"> <li>Use the vocabulary and symbols of set theory. <ul style="list-style-type: none"> <li>Element</li> <li>Subset</li> <li>Finite set</li> <li>Infinite set</li> <li>Null (or empty) set</li> <li>Equal set</li> <li>Intersection</li> <li>Union</li> <li>Venn diagrams</li> </ul> </li> </ul>	<b>Interactive discussion throughout Appetizers</b>		

*Stanford Achievement, Ninth Edition* Advanced 2 objectives not included in this course:

- NUMBER
- Distinguish between prime and composite. (addressed in sixth grade)
  - Identify the place value of a digit in a decimal. (addressed in sixth grade)
- PATTERNS
- Identify missing elements in numeric patterns. (addressed in sixth grade)
- GEOMETRY
- Classify polyhedrons. (addressed in seventh grade)
  - Identify radius and diameter. (addressed in sixth grade)
  - Identify parallel and perpendicular lines. (addressed in fourth grade)
- ROUNDING
- Rounding. (addressed in seventh grade)
- ESTIMATION
- Identify reasonableness. (addressed in sixth grade)