

## Alabama Course of Study, Grade 7, Correlated to *Mathematics: Applications and Concepts, Course 2*

Alabama Course of Study, Grade 7	Student Edition Lesson
<b>Numbers and Operations</b>	
1. Demonstrate computational fluency with addition, subtraction, and multiplication of integers.	3-4a, 3-4, 3-5a, 3-5, 3-6, 3-7, 4-2, 4-4, 6-5
2. Use order of operations to evaluate numerical expressions.	1-2, 1-3, 1-6, 3-1, 3-4, 3-5, 3-6, 3-7, 6-4, 11-1
3. Solve problems requiring the use of operations on rational numbers.	6-1, 6-2, 6-3, 6-4, 6-6, 7-7, 7-8, 8-1, 8-1b, 8-2, 8-3, 8-4, 8-5, 8-6, 8-6b
<b>Algebra</b>	
4. Express a pattern shown in a table, graph, or chart as an algebraic equation.	4-6a, 4-6, 4-7, 7-2b
5. Translate verbal phrases into algebraic expressions and algebraic expressions into verbal phrases.	1-4, 1-5, 4-1
6. Solve one- and two-step equations.	1-5, 4-2a, 4-2, 4-3, 4-4, 4-5, 6-5, 7-3, 7-4, 7-5, 7-7, 7-8, 8-2, 8-3, 8-5, 9-6, 11-3
<b>Geometry</b>	
7. Determine the transformation(s), including translations, reflections, or rotations, used to alter the position of a polygon on the coordinate plane.	3-6, 10-8, 10-8b, 10-9, 10-9b
8. Recognize geometric relationships among two-dimensional and three-dimensional objects.	4-8, 10-1, 10-3, 10-4, 10-5, 10-6, 10-7, 10-8, 10-9, 11-3, 11-4, 11-5, 11-6, 11-7, 12-1a, 12-1, 12-2, 12-2b, 12-3, 12-4, 12-4b, 12-5
<b>Measurement</b>	
9. Solve problems involving circumference and area of circles.	6-9a, 6-9, 11-2, 11-4, 11-5, 11-6
10. Find the perimeter of polygons and the area of triangles and trapezoids.	6-8, 11-5a, 11-5
11. Solve problems involving ratios or rates, using proportional reasoning.	7-1, 7-2, 7-3, 7-3b, 7-4, 7-4b, 7-5, 7-7, 8-3, 9-6
<b>Data Analysis and Probability</b>	
12. Determine measures of central tendency (mean, median, and mode) and the range using a given set of data or graphs, including histograms, frequency tables, and stem-and-leaf plots.	2-1, 2-4, 2-5, 2-7, 2-8
13. Determine the probability of a compound event.	5-2a, 5-2, 5-7, 9-2, 9-3, 9-4, 9-6a, 9-6, 9-6b, 9-7

**SAT 10 Objectives** are addressed by the Alabama Course of Study Standards that are listed above.