

**Performance Level Descriptors (PLDs)**

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>
<b>Policy Statement</b>	The student has a minimal understanding of grade-level standards and is likely to need additional support at this level of learning as described in the Alabama Course of Study.	The student has a partial understanding of grade-level standards and is likely to need some additional support at this level of learning as described in the Alabama Course of Study.	The student has a strong understanding of grade-level standards and demonstrates the knowledge and skills at this level of learning as described in the Alabama Course of Study.	The student has an advanced understanding of grade-level standards and exceedingly demonstrates the knowledge and skills at this level of learning as described in the Alabama Course of Study.
The performance level descriptors describe what a typical student scoring at each performance level can do. A student who scores at a level would be expected to also be able to demonstrate the skills described in previous levels. A student would not necessarily demonstrate all the skills listed at a particular performance level on a particular test in order to score at that level.				
<b>Proportional Reasoning</b>				
7.PR.1 7.PR.2 7.PR.2a 7.PR.2b 7.PR.2c 7.PR.3	<p><b>A student at this level</b></p> <ul style="list-style-type: none"> <li>determines whether two quantities are in a proportional relationship.</li> </ul>	<p><b>A student at this level</b></p> <ul style="list-style-type: none"> <li>calculates unit rates that include ratios or fractions,</li> <li>identifies specified points on the graph of a proportional relationship and interprets their meaning, and</li> <li>uses proportional reasoning to solve simple percent problems.</li> </ul>	<p><b>A student at this level</b></p> <ul style="list-style-type: none"> <li>identifies the constant of proportionality (unit rate) in context and expresses it using multiple representations,</li> <li>explains the meaning of the points <math>(0, 0)</math> and <math>(1, r)</math> on the graph of a proportional relationship where <math>r</math> is the unit rate, and</li> <li>uses proportional reasoning to solve multi-step percent problems.</li> </ul>	<p><b>A student at this level</b></p> <ul style="list-style-type: none"> <li>understands that proportional relationships can have different constants of proportionality and</li> <li>analyzes and interprets numerical and symbolic proportional relationships.</li> </ul>

<b>Number Systems and Operations</b>				
7.NSO.4 7.NSO.4a 7.NSO.4b 7.NSO.4c 7.NSO.4d 7.NSO.4e 7.NSO.4f 7.NSO.4g 7.NSO.5	<b>A student at this level</b> <ul style="list-style-type: none"> <li>understands that a number and its opposite have a sum of 0.</li> </ul>	<b>A student at this level</b> <ul style="list-style-type: none"> <li>adds and subtracts integers using a number line,</li> <li>multiplies and divides integers, and</li> <li>uses addition, subtraction, multiplication, and division to solve real-world and mathematical problems involving positive fractions and decimals.</li> </ul>	<b>A student at this level</b> <ul style="list-style-type: none"> <li>applies properties to add and subtract rational numbers and interprets sums of rational numbers in real-world contexts;</li> <li>applies properties to multiply and divide rational numbers and interprets products and quotients of rational numbers in real-world contexts;</li> <li>converts a rational number to a decimal using long division; and</li> <li>uses addition, subtraction, multiplication, and division to solve real-world and mathematical problems involving rational numbers.</li> </ul>	<b>A student at this level</b> <ul style="list-style-type: none"> <li>applies understanding of all four operations with rational numbers to solve multi-step real-world problems, using fractions and decimals interchangeably, including translating among multiple representations of rational numbers.</li> </ul>

<b>Algebra and Functions</b>				
7.AF.6 7.AF.7 7.AF.8 7.AF.9 7.AF.9a 7.AF.9b	<p><b>A student at this level</b></p> <ul style="list-style-type: none"> <li>identifies when expressions with integer coefficients are equivalent.</li> </ul>	<p><b>A student at this level</b></p> <ul style="list-style-type: none"> <li>uses properties of operations to generate equivalent expressions with integer coefficients,</li> <li>writes and solves multi-step, one-variable equations involving integers, and</li> <li>writes and solves multi-step, one-variable inequalities involving integers and graphs the solution set on a number line.</li> </ul>	<p><b>A student at this level</b></p> <ul style="list-style-type: none"> <li>uses properties of operations to generate equivalent expressions with rational coefficients,</li> <li>writes and solves multi-step, one-variable equations involving rational numbers, and</li> <li>writes and solves multi-step, one-variable inequalities involving rational numbers and graphs the solution set on a number line.</li> </ul>	<p><b>A student at this level</b></p> <ul style="list-style-type: none"> <li>uses multiple properties of operations to strategize and generate equivalent expressions with rational coefficients and</li> <li>uses variables to represent quantities in multi-step word problems, knowing when to use an equation or inequality to represent a solution.</li> </ul>

<b>Data Analysis, Statistics, and Probability</b>				
7.DSP.10 7.DSP.10a 7.DSP.10b 7.DSP.10c 7.DSP.10d 7.DSP.10e 7.DSP.11 7.DSP.12 7.DSP.13 7.DSP.14 7.DSP.14a 7.DSP.14b 7.DSP.15 7.DSP.15a 7.DSP.16 7.DSP.16a 7.DSP.16b 7.DSP.16c	<b>A student at this level</b> <ul style="list-style-type: none"> <li>differentiates between populations and samples;</li> <li>distinguishes between valid and invalid samples;</li> <li>understands probability as quantifiable between 0 and 1; and</li> <li>understands that the probability of a compound event is a fraction of desired outcomes in the sample space.</li> </ul>	<b>A student at this level</b> <ul style="list-style-type: none"> <li>uses data from a random sample to generalize information about a population,</li> <li>approximates simple probability, and</li> <li>represents a sample space for compound events using various methods.</li> </ul>	<b>A student at this level</b> <ul style="list-style-type: none"> <li>uses data from a random sample and numeric measures (including mean absolute deviation) to draw comparative inferences about two populations,</li> <li>develops a probability model, uses it to find or approximate probabilities of events, and compares the model to observed frequencies, and</li> <li>determines probabilities of compound events.</li> </ul>	<b>A student at this level</b> <ul style="list-style-type: none"> <li>develops, uses, and evaluates multiple probability models and</li> <li>designs and uses a simulation to generate frequencies for compound events.</li> </ul>

<b>Geometry and Measurement</b>				
7.GM.17 7.GM.18 7.GM.19 7.GM.20 7.GM.20a 7.GM.20b 7.GM.21 7.GM.22	<p><b>A student at this level</b></p> <ul style="list-style-type: none"> <li>identifies the scale factor of a model;</li> </ul> <ul style="list-style-type: none"> <li>identifies the center, radius, diameter, and circumference of a circle;</li> </ul> <ul style="list-style-type: none"> <li>identifies complementary, supplementary, vertical, and adjacent angles; and</li> </ul>	<p><b>A student at this level</b></p> <ul style="list-style-type: none"> <li>solves problems involving length with scale drawings;</li> </ul> <ul style="list-style-type: none"> <li>describes two-dimensional plane sections of geometric figures that are parallel or perpendicular to bases;</li> </ul> <ul style="list-style-type: none"> <li>uses formulas to find the exact (using <math>\pi</math>) or approximate (using 3.14) area and circumference of a circle;</li> </ul> <ul style="list-style-type: none"> <li>knows properties of complementary, supplementary, vertical, and adjacent angles; and</li> </ul>	<p><b>A student at this level</b></p> <ul style="list-style-type: none"> <li>solves problems involving length and area with scale drawings and reproduces a scale drawing at a different scale;</li> </ul> <ul style="list-style-type: none"> <li>understands when given angle measures and/or side lengths determine a unique triangle, more than one triangle, or no triangle;</li> </ul> <ul style="list-style-type: none"> <li>describes two-dimensional plane sections of geometric figures;</li> </ul> <ul style="list-style-type: none"> <li>solves real-world and mathematical problems using the area and circumference of a circle;</li> </ul> <ul style="list-style-type: none"> <li>solves multi-step problems involving complementary, supplementary, vertical, and adjacent angles, including writing and solving equations for an unknown angle; and</li> </ul>	<p><b>A student at this level</b></p> <ul style="list-style-type: none"> <li>interprets a scale drawing as a proportional relationship and a scale factor as a constant of proportionality and</li> </ul> <ul style="list-style-type: none"> <li>interprets the relationship between the circumference and diameter of a circle as a proportional relationship and <math>\pi</math> as the constant of proportionality.</li> </ul>

	<ul style="list-style-type: none"><li>calculates the area of already-decomposed two-dimensional objects.</li></ul>	<ul style="list-style-type: none"><li>calculates the surface area and volume of already-decomposed three-dimensional objects.</li></ul>	<ul style="list-style-type: none"><li>solves real-world and mathematical problems involving the area, volume, and surface area of two- and three-dimensional objects.</li></ul>	
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