

## CORRELATIONS WITH OKLAHOMA ACADEMIC STANDARDS

### 2023 PK-12 Mathematics and Early Childhood (Comprehensive)

State Subject Codes are available at <https://sde.ok.gov/accreditation-standards-division>  
(in the “Documents” section, select “Subject Codes”)

Oklahoma Academic Standards are available at <https://sde.ok.gov/oklahoma-academic-standards>

**Subject and Oklahoma State Subject Code:** Mathematics 2204

**Title of Textbook / Instructional Material Program:** i-Ready Classroom Mathematics  
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**Grade(s):** 7

#### Oklahoma Academic Standard(s) Correlation

(Include each applicable Oklahoma Academic Standard, creating additional rows in the table as needed.)

Page Number(s) identifying the correlation location	Standard/Objective and Correlating Content
<i>Example: Pages 23-27</i>	<i>Example: PK.N.1.1 Count aloud forward in sequence by 1s to 20.</i>
Grade 6: <b>Lesson 24:</b> Overview: TG pp. 553a–553b Explore: pp. 555–558; Develop: pp. 559–564; Refine: pp. 565–568	<b>7.N.1.1</b> Compare and order rational numbers expressed in various forms using the symbols "<", ">", and "=".  <i>This standard is met in Grade 6:</i> <b>Lesson 24:</b> Order Positive and Negative Numbers
Grade 7: <b>Lesson 15:</b> Overview: TG pp. 307a–307b Explore: pp. 309–312; Develop: pp. 313–324; Refine: pp. 325–328	<b>7.N.1.2</b> Recognize and generate equivalent representations of rational numbers, including equivalent fractions.  <b>Lesson 15:</b> Write Equivalent Expressions Involving Rational Numbers
Grade 6: <b>Lesson 25:</b> Overview: TG pp. 569a–569b Explore: pp. 571–574; Develop: pp. 575–578; Refine: pp. 579–580	<b>7.N.1.3</b> Explain the relationship between the absolute value of a rational number and the distance of that number from zero on a number line. Use the symbol for absolute value. Apply the concept of absolute value to model and solve problems.  <i>This standard is met in Grade 6:</i> <b>Lesson 25:</b> Understand Absolute Value

<p><i>Grade 7:</i>  <b>Lesson 11:</b> Overview: TG pp. 219a–219b  Explore: pp. 221–224; Develop: pp. 225–228;  Refine: pp. 229–230  <b>Lesson 12:</b> Overview: TG pp. 231a–231b  Explore: pp. 233–236; Develop: pp. 237–248;  Refine: pp. 249–252  <b>Lesson 13:</b> Overview: TG pp. 253a–253b  Explore: pp. 255–258; Develop: pp. 259–270;  Refine: pp. 271–274</p>	<p><b>7.N.2.1</b> Estimate solutions to multiplication and division of integers in order to assess the reasonableness of results.</p> <p><b>Lesson 11:</b> Understand Multiplication with Negative Integers  <b>Lesson 12:</b> Multiply and Divide with Negative Numbers  <b>Lesson 13:</b> Express Rational Numbers as Terminating or Repeating Decimals</p>
<p><i>Grade 7:</i>  <b>Lesson 11:</b> Overview: TG pp. 219a–219b  Explore: pp. 221–224; Develop: pp. 225–228;  Refine: pp. 229–230  <b>Lesson 12:</b> Overview: TG pp. 231a–231b  Explore: pp. 233–236; Develop: pp. 237–248;  Refine: pp. 249–252  <b>Lesson 13:</b> Overview: TG pp. 253a–253b  Explore: pp. 255–258; Develop: pp. 259–270;  Refine: pp. 271–274</p>	<p><b>7.N.2.2</b> Illustrate multiplication and division of integers using a variety of representations.</p> <p><b>Lesson 11:</b> Understand Multiplication with Negative Integers  <b>Lesson 12:</b> Multiply and Divide with Negative Numbers  <b>Lesson 13:</b> Express Rational Numbers as Terminating or Repeating Decimals</p>
<p><i>Grade 7:</i>  <b>Lesson 11:</b> Overview: TG pp. 219a–219b  Explore: pp. 221–224; Develop: pp. 225–228;  Refine: pp. 229–230  <b>Lesson 12:</b> Overview: TG pp. 231a–231b  Explore: pp. 233–236; Develop: pp. 237–248;  Refine: pp. 249–252  <b>Lesson 13:</b> Overview: TG pp. 253a–253b  Explore: pp. 255–258; Develop: pp. 259–270;  Refine: pp. 271–274</p>	<p><b>7.N.2.3</b> Multiply and divide integers in a variety of situations; use efficient and generalizable procedures, including standard algorithms.</p> <p><b>Lesson 11:</b> Understand Multiplication with Negative Integers  <b>Lesson 12:</b> Multiply and Divide with Negative Numbers  <b>Lesson 13:</b> Express Rational Numbers as Terminating or Repeating Decimals</p>
<p><i>Grade 8:</i>  <b>Lesson 19:</b> Overview: TG pp. 447a–447b  Explore: pp. 449–452; Develop: pp. 453–464;  Refine: pp. 465–468</p>	<p><b>7.N.2.4</b> Raise rational numbers (integers, fractions, and decimals) to positive integer exponents.</p> <p><i>This standard is met in Grade 8:</i>  <b>Lesson 19:</b> Apply Exponent Properties for Positive Integer Exponents</p>

<p><i>Grade 7:</i>  <b>Lesson 14:</b> Overview: TG pp. 275a–275b  Explore: pp. 277–280; Develop: pp. 281–286;  Refine: pp. 287–290</p>	<p><b>7.N.2.5</b> Model and solve problems using rational numbers involving addition, subtraction, multiplication, division, and positive integer exponents.</p> <p><b>Lesson 14:</b> Use the Four Operations with Negative Numbers</p> <p><i>Note: The lesson cited does not include positive integer exponents.</i></p>
<p><i>Grade 7:</i>  <b>Lesson 3:</b> Overview: TG pp. 47a–47b  Explore: pp. 49–52; Develop: pp. 53–56;  Refine: pp. 57–58  <b>Lesson 4:</b> Overview: TG pp. 59a–59b  Explore: pp. 61–64; Develop: pp. 65–76;  Refine: pp. 77–80  <b>Lesson 5:</b> Overview: TG pp. 81a–81b  Explore: pp. 83–86; Develop: pp. 87–92;  Refine: pp. 93–96</p>	<p><b>7.A.1.1</b> Identify a relationship between two varying quantities, <math>x</math> and <math>y</math>, as proportional if it can be expressed in the form <math>y/x = k</math> or <math>y = kx</math>; distinguish proportional relationships from non-proportional relationships.</p> <p><b>Lesson 3:</b> Understand Proportional Relationships  <b>Lesson 4:</b> Represent Proportional Relationships  <b>Lesson 5:</b> Solve Proportional Relationship Problems</p>
<p><i>Grade 7:</i>  <b>Lesson 4:</b> Overview: TG pp. 59a–59b  Explore: pp. 61–64; Develop: pp. 65–76;  Refine: pp. 77–80</p>	<p><b>7.A.1.2</b> Recognize that the graph of a proportional relationship is a line through the origin and the coordinate <math>(1, r)</math>, where <math>r</math> is the slope and the unit rate (constant of proportionality, <math>k</math>).</p> <p><b>Lesson 4:</b> Represent Proportional Relationships</p>

<p><i>Grade 7:</i>  <b>Lesson 4:</b> Overview: TG pp. 59a–59b  Explore: pp. 61–64; Develop: pp. 65–76;  Refine: pp. 77–80  <b>Lesson 5:</b> Overview: TG pp. 81a–81b  Explore: pp. 83–86; Develop: pp. 87–92;  Refine: pp. 93–96</p> <p><i>Grade 8:</i>  <b>Lesson 8:</b> Overview: TG pp. 175a–175b  Explore: pp. 177–180; Develop: pp. 181–192;  Refine: pp. 193–196</p>	<p><b>7.A.2.1</b> Represent proportional relationships with tables, verbal descriptions, symbols, and graphs; translate from one representation to another. Determine and compare the unit rate (constant of proportionality, slope, or rate of change) given any of these representations.</p> <p><i>This standard is met through lessons across several texts.</i></p> <p><i>Grade 7:</i>  <b>Lesson 4:</b> Represent Proportional Relationships  <b>Lesson 5:</b> Solve Proportional Relationship Problems</p> <p><i>Grade 8:</i>  <b>Lesson 8:</b> Graph Proportional Relationships and Define Slope</p>
<p><i>Grade 7:</i>  <b>Lesson 5:</b> Overview: TG pp. 81a–81b  Explore: pp. 83–86; Develop: pp. 87–92;  Refine: pp. 93–96  <b>Lesson 20:</b> Overview: TG pp. 419a–419b  Explore: pp. 421–424; Develop: pp. 425–442;  Refine: pp. 443–446  <b>Lesson 21:</b> Overview: TG pp. 447a–447b  Explore: pp. 449–452; Develop: pp. 453–464;  Refine: pp. 465–468</p>	<p><b>7.A.2.2</b> Solve multi-step problems with proportional relationships (e.g., distance-time, percent increase or decrease, discounts, tips, unit pricing, mixtures and concentrations, similar figures, other mathematical situations).</p> <p><b>Lesson 5:</b> Solve Proportional Relationship Problems  <b>Lesson 20:</b> Solve Problems Involving Percents  <b>Lesson 21:</b> Solve Problems Involving Percent Change and Percent Error</p>
<p><i>Grade 7:</i>  <b>Lesson 5:</b> Overview: TG pp. 81a–81b  Explore: pp. 83–86; Develop: pp. 87–92;  Refine: pp. 93–96  <b>Lesson 20:</b> Overview: TG pp. 419a–419b  Explore: pp. 421–424; Develop: pp. 425–442;  Refine: pp. 443–446  <b>Lesson 21:</b> Overview: TG pp. 447a–447b  Explore: pp. 449–452; Develop: pp. 453–464;  Refine: pp. 465–468</p>	<p><b>7.A.2.3</b> Use proportional reasoning to solve problems involving ratios.</p> <p><b>Lesson 5:</b> Solve Proportional Relationship Problems  <b>Lesson 20:</b> Solve Problems Involving Percents  <b>Lesson 21:</b> Solve Problems Involving Percent Change and Percent Error</p>

<p><i>Grade 7:</i>  <b>Lesson 5:</b> Overview: TG pp. 81a–81b  Explore: pp. 83–86; Develop: pp. 87–92;  Refine: pp. 93–96  <b>Lesson 20:</b> Overview: TG pp. 419a–419b  Explore: pp. 421–424; Develop: pp. 425–442;  Refine: pp. 443–446  <b>Lesson 21:</b> Overview: TG pp. 447a–447b  Explore: pp. 449–452; Develop: pp. 453–464;  Refine: pp. 465–468</p>	<p><b>7.A.2.4</b> Use proportional reasoning to assess the reasonableness of solutions.</p> <p><b>Lesson 5:</b> Solve Proportional Relationship Problems  <b>Lesson 20:</b> Solve Problems Involving Percents  <b>Lesson 21:</b> Solve Problems Involving Percent Change and Percent Error</p>
<p><i>Grade 7:</i>  <b>Lesson 18:</b> Overview: TG pp. 353a–353b  Explore: pp. 355–358; Develop: pp. 359–370;  Refine: pp. 371–374</p>	<p><b>7.A.3.1</b> Write and solve problems leading to linear equations with one variable in the form <math>px + q = r</math> and <math>p(x + q) = r</math>, where <math>p</math>, <math>q</math>, and <math>r</math> are rational numbers.</p> <p><b>Lesson 18:</b> Write and Solve Multi-Step Equations</p>
<p><i>Grade 7:</i>  <b>Lesson 19:</b> Overview: TG pp. 375a–375b  Explore: pp. 377–380; Develop: pp. 381–398;  Refine: pp. 399–402</p>	<p><b>7.A.3.2</b> Represent, write, solve, and graph problems leading to linear inequalities with one variable in the form <math>x + p &gt; q</math> and <math>x + p &lt; q</math>, where <math>p</math>, and <math>q</math> are nonnegative rational numbers.</p> <p><b>Lesson 19:</b> Write and Solve Inequalities</p> <p><i>Note: The lesson cited extends to inequalities where <math>p</math> and <math>q</math> represent negative rational numbers.</i></p>
<p><i>Grade 7:</i>  <b>Lesson 15:</b> Overview: TG pp. 307a–307b  Explore: pp. 309–312; Develop: pp. 313–324;  Refine: pp. 325–328</p>	<p><b>7.A.4.1</b> Use properties of operations (associative, commutative, and distributive) to generate equivalent numerical and algebraic expressions containing rational numbers, grouping symbols and whole number exponents.</p> <p><b>Lesson 15:</b> Write Equivalent Expressions Involving Rational Numbers</p>
<p><i>Grade 7:</i>  <b>Lesson 13:</b> Overview: TG pp. 253a–253b  Explore: pp. 255–258; Develop: pp. 259–270;  Refine: pp. 271–274  <b>Lesson 14:</b> Overview: TG pp. 275a–275b  Explore: pp. 277–280; Develop: pp. 281–286;  Refine: pp. 287–290</p>	<p><b>7.A.4.2</b> Evaluate numerical expressions using calculators and other technologies and justify solutions using order of operations and grouping symbols.</p> <p><b>Lesson 13:</b> Express Rational Numbers as Terminating or Repeating Decimals  <b>Lesson 14:</b> Use the Four Operations with Negative Numbers</p>

<p><i>Grade 6:</i>  <b>Lesson 3:</b> Overview: TG pp. 41a–41b  Explore: pp. 43–46; Develop: pp. 47–58;  Refine: pp. 59–62</p>	<p><b>7.GM.1.1</b> Recognize that the surface area of a rectangular prism can be found by finding the area of each component of the net of that figure. Know that rectangular prisms of different dimensions can have the same surface area.</p> <p><i>This standard is met in Grade 6:</i>  <b>Lesson 3:</b> Use Nets to Find Surface Area</p>
<p><i>Grade 7:</i>  <b>Lesson 25:</b> Overview: TG pp. 541a–541b  Explore: pp. 543–546; Develop: pp. 547–564;  Refine: pp. 565–568</p>	<p><b>7.GM.1.2</b> Using a variety of tools and strategies, develop the concept that surface area of a rectangular prism can be found by wrapping the figure with same-sized square units without gaps or overlap. Use appropriate measurements (e.g., <math>\text{cm}^2</math>).</p> <p><b>Lesson 25:</b> Solve Problems Involving Area and Surface Area</p>
<p><i>Grade 7:</i>  <b>Lesson 26:</b> Overview: TG pp. 569a–569b  Explore: pp. 571–574; Develop: pp. 575–586;  Refine: pp. 587–590</p>	<p><b>7.GM.1.3</b> Using a variety of tools and strategies, develop the concept that the volume of rectangular prisms can be found by counting the total number of same-sized unit cubes that fill a shape without gaps or overlaps. Use appropriate measurements (e.g., <math>\text{cm}^3</math>).</p> <p><b>Lesson 26:</b> Solve Problems Involving Volume</p>
<p><i>See Grade 6:</i>  <b>Lesson 2:</b> Overview: TG pp. 19a–19b  Explore: pp. 21–24; Develop: pp. 25–36;  Refine: pp. 37–40</p> <p><i>See Grade 7:</i>  <b>Lesson 25:</b> Overview: TG pp. 541a–541b  Explore: pp. 543–546; Develop: pp. 547–564;  Refine: pp. 565–568</p>	<p><b>7.GM.2.1</b> Develop and use the formula to determine the area of a trapezoid.</p> <p><i>This standard is met through lessons across several texts.</i></p> <p><i>Grade 6:</i>  <b>Lesson 2:</b> Find the Area of Triangles and Other Polygons</p> <p><i>Grade 7:</i>  <b>Lesson 25:</b> Solve Problems Involving Area and Surface Area</p>
<p><i>Grade 7:</i>  <b>Lesson 25:</b> Overview: TG pp. 541a–541b  Explore: pp. 543–546; Develop: pp. 547–564;  Refine: pp. 565–568</p>	<p><b>7.GM.2.2</b> Find the area and perimeter of composite figures.</p> <p><b>Lesson 25:</b> Solve Problems Involving Area and Surface Area</p>

<p><i>Grade 6:</i>  <b>Lesson 16:</b> Overview: TG pp. 357a–357b  Explore: pp. 359–362; Develop: pp. 363–380;  Refine: pp. 381–384</p>	<p><b>7.GM.3.1</b> Solve problems that require the conversion of weights and capacities within the same measurement systems using appropriate units.</p> <p><i>This standard is met in Grade 6:</i>  <b>Lesson 16:</b> Use Unit Rates to Solve Problems</p>
<p><i>Grade 7:</i>  <b>Lesson 6:</b> Overview: TG pp. 97a–97b  Explore: pp. 99–102; Develop: pp. 103–114;  Refine: pp. 115–118</p>	<p><b>7.GM.3.2</b> Demonstrate an understanding of the proportional relationship between the diameter and circumference of a circle and that the unit rate (constant of proportionality) is pi (<math>\pi</math>) and can be approximated by rational numbers such as <math>\frac{22}{7}</math> and 3.14.</p> <p><b>Lesson 6:</b> Solve Area and Circumference Problems Involving Circles</p>
<p><i>Grade 7:</i>  <b>Lesson 6:</b> Overview: TG pp. 97a–97b  Explore: pp. 99–102; Develop: pp. 103–114;  Refine: pp. 115–118</p>	<p><b>7.GM.3.3</b> Calculate the circumference and area of circles to solve problems in various contexts, in terms of pi (<math>\pi</math>) and using approximations for pi (<math>\pi</math>).</p> <p><b>Lesson 6:</b> Solve Area and Circumference Problems Involving Circles</p>
<p><i>Grade 7:</i>  <b>Lesson 1:</b> Overview: TG pp. 3a–3b  Explore: pp. 5–8; Develop: pp. 9–26; Refine: pp. 27–30</p> <p><i>Grade 8:</i>  <b>Lesson 4:</b> Overview: TG pp. 81a–81b  Explore: pp. 83–86; Develop: pp. 87–90;  Refine: pp. 91–92  <b>Lesson 5:</b> Overview: TG pp. 93a–93b  Explore: pp. 95–98; Develop: pp. 99–110;  Refine: pp. 111–114</p>	<p><b>7.GM.4.1</b> Describe the properties of similarity, compare geometric figures for similarity, and determine scale factors resulting from dilations.</p> <p><i>This standard is met through lessons across several texts.</i></p> <p><i>Grade 7:</i>  <b>Lesson 1:</b> Solve Problems Involving Scale</p> <p><i>Grade 8:</i>  <b>Lesson 4:</b> Understand Dilations and Similarity  <b>Lesson 5:</b> Perform and Describe Transformations Involving Dilations</p>

<p><i>Grade 7:</i>  <b>Lesson 1:</b> Overview: TG pp. 3a–3b  Explore: pp. 5–8; Develop: pp. 9–26; Refine: pp. 27–30</p>	<p><b>7.GM.4.2</b> Apply proportions, ratios, and scale factors to solve problems involving scale drawings and to determine side lengths and areas of similar triangles and rectangles.</p> <p><b>Lesson 1:</b> Solve Problems Involving Scale</p>
<p><i>Grade 8:</i>  <b>Lesson 2:</b> Overview: TG pp. 15a–15b  Explore: pp. 17–20; Develop: pp. 21–38; Refine: pp. 39–42  <b>Lesson 3:</b> Overview: TG pp. 43a–43b  Explore: pp. 45–48; Develop: pp. 49–60; Refine: pp. 61–64</p>	<p><b>7.GM.4.3</b> Graph and describe translations (with directional and algebraic instructions), reflections across the x- and y-axes, and rotations in 90° increments about the origin of figures on a coordinate plane, and determine the coordinates of the vertices of a figure after a transformation.</p> <p><i>This standard is met in Grade 8:</i>  <b>Lesson 2:</b> Work with Single Rigid Transformations in the Coordinate Plane  <b>Lesson 3:</b> Work with Sequences of Transformations and Congruence</p>
<p><i>Grade 6:</i>  <b>Lesson 29:</b> Overview: TG pp. 659a–659b  Explore: pp. 661–664; Develop: pp. 665–668; Refine: pp. 669–670  <b>Lesson 30:</b> Overview: TG pp. 671a–671b  Explore: pp. 673–676; Develop: pp. 677–688; Refine: pp. 689–692  <b>Lesson 31:</b> Overview: TG pp. 693a–693b  Explore: pp. 695–698; Develop: pp. 699–710; Refine: pp. 711–714  <b>Lesson 32:</b> Overview: TG pp. 715a–715b  Explore: pp. 717–720; Develop: pp. 721–732; Refine: pp. 733–736</p>	<p><b>7.D.1.1</b> Design simple experiments, collect data, and calculate measures of center (mean, median, and mode) and spread (range and interquartile range). Use these quantities to draw conclusions about the data collected and make predictions.</p> <p><i>This standard is met in Grade 6:</i>  <b>Lesson 29:</b> Understand Statistical Questions and Data Distributions  <b>Lesson 30:</b> Use Dot Plots and Histograms to Describe Data Distributions  <b>Lesson 31:</b> Interpret Median and Interquartile Range in Box Plots  <b>Lesson 32:</b> Interpret Mean and Mean Absolute Deviation</p>
<p><i>Grade 6:</i>  <b>Lesson 30:</b> Overview: TG pp. 671a–671b  Explore: pp. 673–676; Develop: pp. 677–688; Refine: pp. 689–692</p>	<p><b>7.D.1.2</b> Use reasoning with proportions to display and interpret data in circle graphs (pie charts) and histograms.</p> <p><i>This standard is partially met in Grade 6:</i>  <b>Lesson 30:</b> Use Dot Plots and Histograms to Describe Data Distributions</p> <p><i>Note: Circle graphs are not included in i-Ready Classroom Mathematics.</i></p>



<p><i>Grade 6:</i>  <b>Lesson 31:</b> Overview: TG pp. 693a–693b  Explore: pp. 695–698; Develop: pp. 699–710;  Refine: pp. 711–714</p>	<p><b>7.D.1.3</b> Use technology to create and analyze box plots.</p> <p><i>This standard is met in Grade 6:</i>  <b>Lesson 31:</b> Interpret Median and Interquartile Range in Box Plots</p>
<p><i>Grade 7:</i>  <b>Lesson 31:</b> Overview: TG pp. 685a–685b  Explore: pp. 687–690; Develop: pp. 691–702;  Refine: pp. 703–706  <b>Lesson 32:</b> Overview: TG pp. 707a–707b  Explore: pp. 709–712; Develop: pp. 713–724;  Refine: pp. 725–728</p>	<p><b>7.D.2.1</b> Determine the theoretical probability of an event using the ratio between the size of the event and the size of the sample space; represent probabilities as percents, fractions and decimals between 0 and 1.</p> <p><b>Lesson 31:</b> Solve Problems Involving Experimental Probability  <b>Lesson 32:</b> Solve Problems Involving Probability Models</p>
<p><i>Grade 7:</i>  <b>Lesson 31:</b> Overview: TG pp. 685a–685b  Explore: pp. 687–690; Develop: pp. 691–702;  Refine: pp. 703–706  <b>Lesson 32:</b> Overview: TG pp. 707a–707b  Explore: pp. 709–712; Develop: pp. 713–724;  Refine: pp. 725–728</p>	<p><b>7.D.2.2</b> Calculate probability as a fraction of sample space or as a fraction of area. Express probabilities as percents, decimals and fractions.</p> <p><b>Lesson 31:</b> Solve Problems Involving Experimental Probability  <b>Lesson 32:</b> Solve Problems Involving Probability Models</p>
<p><i>Grade 7:</i>  <b>Lesson 31:</b> Overview: TG pp. 685a–685b  Explore: pp. 687–690; Develop: pp. 691–702;  Refine: pp. 703–706  <b>Lesson 32:</b> Overview: TG pp. 707a–707b  Explore: pp. 709–712; Develop: pp. 713–724;  Refine: pp. 725–728</p>	<p><b>7.D.2.3</b> Use proportional reasoning to draw conclusions about and predict relative frequencies of outcomes based on theoretical probabilities.</p> <p><b>Lesson 31:</b> Solve Problems Involving Experimental Probability  <b>Lesson 32:</b> Solve Problems Involving Probability Models</p>