



SuccessMaker®

enVision Mathematics ©2021

Grade 8

Alignments to SuccessMaker

Providing rigorous intervention

for K-8 learners with unparalleled precision

| enVision Mathematics 2021 Grade 8 Student Edition | enVision Mathematics 2021 Page Number | SuccessMaker Item Description | Item ID |
|--|--|---|---------------|
| Topic 1: Real Numbers | | | |
| 1-2 Understand Irrational Numbers | 15-20 | Identify irrational numbers. | SMMA_LO_02178 |
| 1-3 Compare and Order Real Numbers | 21-26 | Compare two expressions using the additive inverse property. | SMMA_LO_00120 |
| | | Complete statements of order for rational numbers in real-world contexts. | SMMA_LO_02110 |
| | | Compare rational numbers in real-world contexts. | SMMA_LO_02109 |
| 1-4 Evaluate Square Roots and Cube Roots | 27-32 | Find the square root of a number using a calculator (numbers to 4000). | SMMA_LO_01120 |
| Mid-Topic Performance Task | 40 | Identify irrational numbers. | SMMA_LO_02178 |
| | | Compare rational numbers in real-world contexts. | SMMA_LO_02109 |
| 1-6 Use Properties of Integer Exponents | 41-46 | Evaluate an algebraic expression with exponents (integers -10 to 10). | SMMA_LO_01818 |
| 1-7 More Properties of Exponents | 47-52 | Evaluate an algebraic expression with exponents (integers -10 to 10). | SMMA_LO_01818 |
| 1-8 Use Powers of 10 to Estimate Quantities | 53-58 | Write very small numbers in scientific notation. | SMMA_LO_02070 |
| | | Write very large numbers in scientific notation. | SMMA_LO_02071 |
| 1-9 Understand Scientific Notation | 59-64 | Find the missing exponent for a number written in scientific notation (the exponent is 1 to 6). | SMMA_LO_01122 |
| | | Write very small numbers in scientific notation. | SMMA_LO_02070 |
| | | Student do operations on scientific notation to compare the speed of planes. | SMMA_LO_02515 |
| | | Given the scientific notation, determine the standard notation of a number (the power of 10 has an exponent of 1 to 6). | SMMA_LO_01121 |
| | | Express a number in scientific notation (exponents 1 to 6). | SMMA_LO_01113 |
| | | Write very large numbers in scientific notation. | SMMA_LO_02071 |

| enVision Mathematics 2021 Grade 8 Student Edition | enVision Mathematics 2021 Page Number | SuccessMaker Item Description | Item ID |
|--|--|---|---------------|
| 1-10 Operations with Numbers in Scientific Notation | 69-74 | Find the missing exponent for a number written in scientific notation (the exponent is 1 to 6). | SMMA_LO_01122 |
| | | Write very small numbers in scientific notation. | SMMA_LO_02070 |
| | | Student do operations on scientific notation to compare the speed of planes. | SMMA_LO_02515 |
| | | Given the scientific notation, determine the standard notation of a number (the power of 10 has an exponent of 1 to 6). | SMMA_LO_01121 |
| | | Express a number in scientific notation (exponents 1 to 6). | SMMA_LO_01113 |
| | | Write very large numbers in scientific notation. | SMMA_LO_02071 |
| Topic 2: Analyze and Solve Linear Equations | | | |
| 2-1 Combine Like Terms to Solve Equations | 89-94 | Rewrite an expression from context by factoring and combining like terms. | SMMA_LO_02150 |
| 2-2 Solve Equations with Variables on Both Sides | 95-100 | Generate and solve an equation with variables on both sides of the equal sign in a real-world context. | SMMA_LO_02145 |
| 2-3 Solve Multi-Step Equations | 101-106 | Solve a two-step equation (decimals). | SMMA_LO_01851 |
| | | Solve for a two-step equation in context. | SMMA_LO_01638 |
| | | Solve a two-step equation (fractions, multiplication). | SMMA_LO_01850 |
| | | Solve a two-step equation (integers). | SMMA_LO_01846 |
| | | Solve for a or c in $a/b - c/b =$ d/b (improper fractions, minuends $4/3$ to $35/12$). | SMMA_LO_00362 |
| | | Complete the steps to solve for x in $a - x = b$. | SMMA_LO_00396 |
| | | Solve for x in $ax = c$ in steps (products 4×4 to 9×10). | SMMA_LO_00380 |
| | | Transform a given multi-step equation into a simpler form. | SMMA_LO_02079 |
| | | Ratios and Equations Targeted Lesson 27: Writing and Solving Equations from Situations | |

| enVision Mathematics 2021 Grade 8 Student Edition | enVision Mathematics 2021 Page Number | SuccessMaker Item Description | Item ID |
|---|--|---|---------------|
| 2-4 Equations with No Solutions and Infinitely Many Solutions | 107-114 | Solve for x in $ax = b$ (products from $-(4 \times 4)$ to $-(9 \times 9)$). | SMMA_LO_00390 |
| | | Solve for a or b in $a + b = c$ (sums 12 to 98). | SMMA_LO_00341 |
| | | Complete the steps to solve for x in $ax - b = c$ (x is from -9 to 9). | SMMA_LO_00394 |
| | | Solve for a in $a + b = c$ (a is from -20 to -1). | SMMA_LO_00388 |
| | | Solve for x in $-x = a$ (numbers from -99 to 99). | SMMA_LO_00395 |
| | | Solve for a , b , c , or d in $a/b \times$ $c/d = e/f$ (combinations to $12 \times$ 12). | SMMA_LO_00372 |
| | | Solve for a or c in $a/b + c/b =$ d/b (improper fractions, sums $4/3$ to $35/12$). | SMMA_LO_00364 |
| Mid-Topic Performance Task | 116 | Ratios and Equations Targeted Lesson 27: Writing and Solving Equations from Situations | |
| 3-Act Mathematical Modeling: Powering Down | 117-120 | Use a model to represents a word problem involving multiplicative comparison. Then, use an equation to represent the solution to the word problem. | SMMA_LO_02009 |
| | | Ratios and Equations Targeted Lesson 27: Writing and Solving Equations from Situations | |
| 2-5 Compare Proportional Relationships | 121-126 | Solve a problem in context using proportions. | SMMA_LO_01635 |
| | | Identify the correct proportion for the context, and then solve. | SMMA_LO_01826 |
| | | Compare a proportional relationship represented as a graph to a proportional relationship represented as a table. | SMMA_LO_02074 |
| | | Identify the unit rate given a table, a graph, an equation, a diagram, or a word problem. | SMMA_LO_02001 |
| | | Solve a proportion problem in context. | SMMA_LO_01284 |
| | | Students use proportions to calculate their weight on Mars. | SMMA_LO_02513 |
| | | Identify the constant of proportionality given a table, a graph, an equation, a diagram, or a word problem. | SMMA_LO_02002 |

| enVision Mathematics 2021 Grade 8 Student Edition | enVision Mathematics 2021 Page Number | SuccessMaker Item Description | Item ID |
|--|--|---|---------------|
| | | Determine the fraction needed to complete the proportion. | SMMA_LO_01827 |
| | | Ratios and Equations Targeted Lesson 14: Graphing Proportional Relationships | |
| | | Find missing values in a table that represents a proportional relationship, and plot the pairs of values on the coordinate plane. | SMMA_LO_02115 |
| | | Ratios and Equations Targeted Lesson 13: Identifying Proportional Relationships | |
| 2-6 Connect Proportional Relationships and Slope | 127-132 | Determine the slope and intercept of a linear equation in context. | SMMA_LO_02180 |
| 2-7 Analyze Linear Equations: $y = mx$ | 133-138 | Graph proportional relationships and interpret the unit rate as the slope of the graph. | SMMA_LO_02073 |
| | | Ratios and Equations Targeted Lesson 12: Rates, Formulas, and Graphs | |
| | | Identify the constant of proportionality given a table, a graph, an equation, a diagram, or a word problem. | SMMA_LO_02002 |
| | | Ratios and Equations Targeted Lesson 14: Graphing Proportional Relationships | |
| | | Students write, graph, and compare two linear functions in order to find the best price for football jerseys. | SMMA_LO_02516 |
| 2-8 Understand the y-Intercept of a Line | 139-144 | Determine the slope and intercept of a linear equation in context. | SMMA_LO_02180 |
| Fluency Practice Activity | 157 | Complete the steps to solve for x in $ax + b = c$. | SMMA_LO_00383 |
| | | Complete the steps to solve for x in $ax - b = c$ (x is from -9 to 2). | SMMA_LO_00393 |
| | | Solve a two-step equation (integers). | SMMA_LO_01846 |
| | | Solve a two-step addition problem to find a person's age in 5 to 20 years from now. | SMMA_LO_01631 |
| | | Complete the steps to solve for x in $ax + b = c$ (x is from -9 to -1). | SMMA_LO_00392 |

| enVision Mathematics 2021 Grade 8 Student Edition | enVision Mathematics 2021 Page Number | SuccessMaker Item Description | Item ID |
|--|--|---|---------------|
| | | Complete the steps to solve for x in $ax - b = c$ (x is from -9 to 9). | SMMA_LO_00394 |
| Topic 3: Use Functions to Model Relationships | | | |
| 3-1 Understand Relations and Functions | 165-170 | Given a set of graphs of relations, identify which graphs represent functions. | SMMA_LO_01835 |
| | | Identify the function that is represented by a table of values (linear and nonlinear). | SMMA_LO_01883 |
| | | Given a graph of a relation, identify two ordered pairs on the graph that show the relation is not a function. | SMMA_LO_01812 |
| | | Given a list of ordered pairs of a relation, identify two ordered pairs that show the relation is not a function. | SMMA_LO_01811 |
| 3-2 Connect Representations of Functions | 171-176 | Complete a table of values and graph the equation of a linear function. | SMMA_LO_01837 |
| | | Identify the function that is represented by a table of values (linear and nonlinear). | SMMA_LO_01883 |
| | | Identify whether graphs are linear or exponential. | SMMA_LO_01830 |
| | | Identify the rate of change and the y-intercept of two linear functions, one represented in a table, and one represented either algebraically or in a verbal description. | SMMA_LO_02103 |
| | | Identify the rate of change and the y-intercept of two linear functions, one represented in a verbal description, and one represented either graphically or algebraically. | SMMA_LO_02102 |
| | | Identify the rate of change and the y-intercept of two linear functions, one represented graphically, and one represented either algebraically or in a table. | SMMA_LO_02101 |
| 3-3 Compare Linear and Nonlinear Functions | 177-182 | Identify whether graphs are linear or exponential. | SMMA_LO_01830 |

| enVision Mathematics 2021 Grade 8 Student Edition | enVision Mathematics 2021 Page Number | SuccessMaker Item Description | Item ID |
|--|--|--|---------------|
| | | Identify the rate of change and the y-intercept of two linear functions, one represented in a table, and one represented either algebraically or in a verbal description. | SMMA_LO_02103 |
| | | Identify the rate of change and the y-intercept of two linear functions, one represented in a verbal description, and one represented either graphically or algebraically. | SMMA_LO_02102 |
| | | Determine if a table values represents a linear or exponential function. | SMMA_LO_01881 |
| | | Determine if a table values represents a linear or quadratic function. | SMMA_LO_01882 |
| | | Identify whether graphs are linear or quadratic. | SMMA_LO_01831 |
| | | Students write, graph, and compare two linear functions in order to find the best price for football jerseys. | SMMA_LO_02516 |
| | | Identify the rate of change and the y-intercept of two linear functions, one represented graphically, and one represented either algebraically or in a table. | SMMA_LO_02101 |
| Mid-Topic Performance Task | 184 | Determine if a table values represents a linear or nonlinear function. | SMMA_LO_01834 |
| | | Identify if an equation is a linear or nonlinear function. | SMMA_LO_01833 |
| | | Identify the rate of change and the y-intercept of two linear functions, one represented in a table, and one represented either algebraically or in a verbal description. | SMMA_LO_02103 |
| | | Identify the rate of change and the y-intercept of two linear functions, one represented in a verbal description, and one represented either graphically or algebraically. | SMMA_LO_02102 |
| | | Identify whether graphs are linear or nonlinear. | SMMA_LO_01832 |

| enVision Mathematics 2021 Grade 8 Student Edition | enVision Mathematics 2021 Page Number | SuccessMaker Item Description | Item ID |
|---|--|---|---------------|
| | | Identify the rate of change and the y-intercept of two linear functions, one represented graphically, and one represented either algebraically or in a table. | SMMA_LO_02101 |
| 3-4 Construct Functions to Model Linear Relationships | 189-194 | Students use linear functions to solve a problem surrounding manufacturing stock decay. | SMMA_LO_02517 |
| | | Derive the equation $y = mx$ for a line through the origin, and $y = mx + b$ for a line intercepting the vertical axis at b . | SMMA_LO_02076 |
| Fluency Practice Activity | 211 | Complete the steps to solve for x in $ax + b = c$. | SMMA_LO_00383 |
| | | Complete the steps to solve for x in $ax - b = c$ (x is from -9 to 2). | SMMA_LO_00393 |
| | | Complete the steps to solve for x in $ax + b = c$ (x is from -9 to -1). | SMMA_LO_00392 |
| | | Solve for x in $ax + b = c$. | SMMA_LO_00384 |
| | | Complete the steps to solve for x in $ax - b = c$ (x is from -9 to 9). | SMMA_LO_00394 |
| Topic 4: Investigate Bivariate Data | | | |
| STEM Project | 214 | Determine the fraction needed to complete the proportion. | SMMA_LO_01827 |
| 4-1 Construct and Interpret Scatter Plots | 219-224 | Identify positive, negative, or no association for sets of actual data. | SMMA_LO_01222 |
| 4-2 Analyze Linear Associations | 225-230 | Identify positive, negative, or no association for sets of actual data. | SMMA_LO_01222 |
| | | Determine the line of best fit for data in a scatter plot. | SMMA_LO_02179 |
| 4-3 Use Linear Models to Make Predictions | 231-236 | Determine the slope and intercept of a linear equation in context. | SMMA_LO_02180 |
| | | Choose an approximation based on a trend line for bivariate data. | SMMA_LO_02143 |
| | | Determine the line of best fit for data in a scatter plot. | SMMA_LO_02179 |
| Mid-Topic Performance Task | 238 | Choose an approximation based on a trend line for bivariate data. | SMMA_LO_02143 |
| | | Determine the line of best fit for data in a scatter plot. | SMMA_LO_02179 |

| enVision Mathematics 2021 Grade 8 Student Edition | enVision Mathematics 2021 Page Number | SuccessMaker Item Description | Item ID |
|---|--|--|---------------|
| 4-4 Interpret Two-Way Frequency Tables | 239-244 | Determine the relative frequency of events using a two-way frequency table. | SMMA_LO_02206 |
| Fluency Practice Activity | 259 | Transform a given multi-step equation into a simpler form. | SMMA_LO_02079 |
| Topic 5: Analyze and Solve Systems of Linear Equations | | | |
| Pros and Cons | 265-266 | Model a real-world problem with a system of linear equations. Then solve it by locating the intersection point of the graphs of the two equations. | SMMA_LO_02134 |
| | | Identify the solution to a system of linear equations by locating the point of intersection on its graph. | SMMA_LO_02080 |
| 5-1 Estimate Solutions by Inspection | 267-272 | If a system of linear equations has 0 or infinitely many solutions, solve it by inspection. If it has 1 solution, solve it either algebraically or by graphing. | SMMA_LO_02133 |
| 5-2 Solve Systems by Graphing | 273-278 | Model a real-world problem with a system of linear equations. Then solve it by locating the intersection point of the graphs of the two equations. | SMMA_LO_02134 |
| | | If a system of linear equations has 0 or infinitely many solutions, solve it by inspection. If it has 1 solution, solve it either algebraically or by graphing. | SMMA_LO_02133 |
| | | Identify the solution to a system of linear equations by locating the point of intersection on its graph. | SMMA_LO_02080 |
| Topic 6: Congruence and Similarity | | | |
| 6-1 Analyze Translations | 309-314 | Translate a figure on a coordinate plane. | SMMA_LO_02120 |
| | | Translate a figure on a coordinate plane; verify properties of the rotation. | SMMA_LO_02123 |
| | | Identify a reflection, a rotation, and a translation of a geometric figure. | SMMA_LO_00665 |
| | | Identify a transformation as a slide, flip, or a turn. | SMMA_LO_01776 |

| enVision Mathematics 2021 Grade 8 Student Edition | enVision Mathematics 2021 Page Number | SuccessMaker Item Description | Item ID |
|--|--|---|---------------|
| 6-2 Analyze Reflections | 315-320 | Given two points, describe how the points are related: reflected across the x-axis, reflected across the y-axis, or reflected across both axes. | SMMA_LO_02108 |
| | | Identify a set of geometric figures that show a reflection (flip). | SMMA_LO_00648 |
| | | Reflect a figure, find the coordinates of the reflected figure, and describe the effect of the reflection on the coordinates. | SMMA_LO_02125 |
| | | Reflect a figure on a coordinate plane over the x-axis, the y-axis, or the line $y = x$; verify properties of the rotation. | SMMA_LO_02122 |
| | | Reflect a figure on a coordinate plane over the x-axis, the y-axis, or the line $y = x$. | SMMA_LO_02105 |
| | | Identify a reflection, a rotation, and a translation of a geometric figure. | SMMA_LO_00665 |
| | | Identify a transformation as a slide, flip, or a turn. | SMMA_LO_01776 |
| 6-3 Analyze Rotations | 321-326 | Rotate a figure on a coordinate plane; verify properties of the rotation. | SMMA_LO_02121 |
| | | Rotate a figure by 90, 180, or 270 degrees clockwise or counterclockwise on a coordinate plane. | SMMA_LO_02104 |
| | | Identify a reflection, a rotation, and a translation of a geometric figure. | SMMA_LO_00665 |
| | | Identify a transformation as a slide, flip, or a turn. | SMMA_LO_01776 |
| 6-4 Compose Transformations | 327-332 | In a figure in which parallel lines are cut by a transversal, identify the transformations that would line one angle up with another angle. Then, describe the relationship between the two angles. | SMMA_LO_02129 |
| | | Identify a transformation as a slide, flip, or a turn. | SMMA_LO_01776 |
| 6-5 Understand Congruent Figures | 337-342 | Identify matching congruent figures under rotation and/or reflection. | SMMA_LO_00557 |

| enVision Mathematics 2021 Grade 8 Student Edition | enVision Mathematics 2021 Page Number | SuccessMaker Item Description | Item ID |
|--|--|---|---------------|
| 6-6 Describe Dilations | 345-350 | Determine the algebraic expression used to find the coordinates of the image of a figure under a dilation with the origin as the center of dilation. | SMMA_LO_02142 |
| 6-7 Understand Similar Figures | 351-356 | Identify similar triangles or rectangles on a geoboard. | SMMA_LO_00847 |
| 6-8 Angles, Lines, and Transversals | 357-364 | In a figure in which parallel lines are cut by a transversal, identify the transformations that would line one angle up with another angle. Then, describe the relationship between the two angles. | SMMA_LO_02129 |
| 6-9 Interior and Exterior Angles of Triangles | 365-370 | Arrange statements to write a proof of a fact about either the angle sum or the exterior angle of a triangle. | SMMA_LO_02126 |
| | | Use a protractor to measure an angle in a triangle or quadrilateral; then find the sum of all the angles in the figure. | SMMA_LO_00650 |
| 6-10 Angle-Angle Triangle Similarity | 371-376 | In a figure in which parallel lines are cut by a transversal, identify the transformations that would line one angle up with another angle. Then, describe the relationship between the two angles. | SMMA_LO_02129 |
| Fluency Practice Activity | 383 | Solve a two-step equation (decimals). | SMMA_LO_01851 |
| | | Solve a two-step equation (fractions, multiplication). | SMMA_LO_01850 |
| | | Generate and solve an equation with variables on both sides of the equal sign in a real-world context. | SMMA_LO_02145 |
| Topic 7: Understand and Apply the Pythagorean Theorem | | | |
| 7-1 Understand the Pythagorean Theorem | 395-400 | Explain a proof of the Pythagorean Theorem. | SMMA_LO_02131 |
| | | Find the measurement of the hypotenuse using the Pythagorean theorem. (2D) | SMMA_LO_01854 |
| 7-2 Understand the Converse of the Pythagorean Theorem | 401-406 | Explain a proof of the converse of the Pythagorean Theorem. | SMMA_LO_02132 |
| Mid-Topic Performance Task | 408 | Find the measurement of the hypotenuse using the Pythagorean theorem. (2D) | SMMA_LO_01854 |

| enVision Mathematics 2021 Grade 8 Student Edition | enVision Mathematics 2021 Page Number | SuccessMaker Item Description | Item ID |
|---|--|--|---------------|
| 7-3 Apply the Pythagorean Theorem to Solve Problems | 409-414 | Find the measurement of the hypotenuse using the Pythagorean theorem. (2D) | SMMA_LO_01854 |
| 7-4 Find Distance in the Coordinate Plane | 415-420 | Given two points on a coordinate grid, draw a right triangle whose hypotenuse connects the two points. Then use the Pythagorean Theorem to find the distance between the two points. | SMMA_LO_02100 |
| | | Find the measurement of the hypotenuse using the Pythagorean theorem. (2D) | SMMA_LO_01854 |
| Fluency Practice Activity | 425 | Complete the steps to solve for x in $ax + b = c$. | SMMA_LO_00383 |
| | | Solve a two-step equation (decimals). | SMMA_LO_01851 |
| | | Solve a two-step multiplication and addition problem in context. | SMMA_LO_01633 |
| | | Complete the steps to solve for x in $ax - b = c$ (x is from -9 to 2). | SMMA_LO_00393 |
| | | Solve a two-step equation (fractions, multiplication). | SMMA_LO_01850 |
| | | Solve a two-step equation (integers). | SMMA_LO_01846 |
| | | Complete the steps to solve for x in $ax + b = c$ (x is from -9 to -1). | SMMA_LO_00392 |
| | | Solve for a or c in $a/b - c/b = d/b$ (improper fractions, minuends $4/3$ to $35/12$). | SMMA_LO_00362 |
| | | Generate and solve an equation with variables on both sides of the equal sign in a real-world context. | SMMA_LO_02145 |
| Topic 8: Solve Problems Involving Surface Area and Volume | | | |

| enVision Mathematics 2021 Grade 8 Student Edition | enVision Mathematics 2021 Page Number | SuccessMaker Item Description | Item ID |
|--|--|--|----------------|
| 8-1 Find Surface Area of Three-Dimensional Figures | 433-438 | Use a formula to find the surface area of a cylinder or sphere. | SMMA_LO_00840 |
| | | Generalize a figure for surface area, and then use that formula to find the surface area of a given figure. | SMMA_LO_02144 |
| 8-2 Find Volume of Cylinders | 439-444 | Use a formula to find the volume of a cylinder. | SMMA_LO_00839 |
| Mid-Topic Performance Task | 446 | Use a formula to find the volume of a cylinder. | SMMA_LO_00839 |
| 8-3 Find Volume of Cones | 447-452 | Use a formula to find the volume of a cone or a sphere. | SMMA_LO_00844 |
| 8-4 Find Volume of Spheres | 453-458 | Use a formula to find the volume of a cone or a sphere. | SMMA_LO_00844 |