

**Please Note:**

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**Publisher Resource:**

[Pearson](#) (select your grade and course level and use your active directory)

**Other Course Supplemental Resources:**

[Khan Academy](#) (7<sup>th</sup> Grade; does not support Internet Explorer)

[Khan Academy](#) (8<sup>th</sup> Grade – Pre-Algebra; does not support Internet Explorer)

[Illustrative Mathematics](#) (7<sup>th</sup> Grade; does not support Internet Explorer)

[Illustrative Mathematics](#) (8<sup>th</sup> Grade; does not support Internet Explorer)

[Math Nation](#) (Clever – use your active directory; does not support Internet Explorer)

[FSA Portal](#)

[Grade 7 Mathematics Test Item Specifications](#)

[Grade 7 FSA Mathematics Computer-Based Practice Test Answer Key](#)

[PARCC \(Partnership for Assessment of Readiness for College and Careers\) - Mathematics Practice Tests with Answer Keys](#)

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	Week	Major Concepts / Topics	Possible Resources
Quarter 1 Aug 12 – Oct 11	1 8/12 – 8/16	<ul style="list-style-type: none"> <li>1-1 Rational Numbers as Decimals (8.NS.1.1)</li> <li>1-2 Understand Rational Numbers (8.NS.1.1)</li> <li>1-3 Compare and Order Real Numbers (8.NS.1.2)</li> <li>1-4 Evaluate Square Roots and Cube Roots (8.EE.1.2)</li> </ul>	Introduction to Rational and Irrational Numbers – <a href="#">Khan Academy</a> Compare Rational Numbers – <a href="#">Khan Academy</a> Approximating Square Roots – <a href="#">Khan Academy</a>
	2 8/19 – 8/23	<ul style="list-style-type: none"> <li>1-5 Solve Equations Using Square Roots and Cube Roots (8.EE.1.2)</li> <li>1-6 Use Properties of Integer Exponents (8.EE.1.2)</li> <li>1-7 More Properties of Integer Exponents (8.EE.1.1)</li> <li>1-8 Use Powers of 10 to Estimate Quantities (8.EE.1.3)</li> <li>1-9 Understand Scientific Notation (8.EE.1.4)</li> </ul>	Solving Cube Roots – <a href="#">Khan Academy</a> Properties of exponents – <a href="#">Khan Academy</a> Using Powers of ten – <a href="#">Khan Academy</a> Scientific Notation – <a href="#">Khan Academy</a>
	3 8/26 – 8/30	<ul style="list-style-type: none"> <li>3-Act Mathematical Modeling: Hard-Working Organs (8.EE.1.1, 8.EE.1.3)</li> <li>1-10 Operations with Numbers in Scientific Notation (8.EE.1.4)</li> </ul>	Adding and Subtracting in Scientific Notation – <a href="#">Khan Academy</a> Multiplying and Dividing in Scientific Notation – <a href="#">Khan Academy</a>
	4 9/3 – 9/6	<ul style="list-style-type: none"> <li>Labor Day Holiday (9/2)</li> <li>1-1 – 1-10 Real Numbers</li> </ul>	Scientific Notation Review – <a href="#">Khan Academy</a>
	5 9/9 – 9/13	<ul style="list-style-type: none"> <li>2-1 Write Two Step Equations (7.EE.2.4)</li> <li>2-2 Solve Two-Step Equations (7.EE.2.3, 7.EE.2.4a)</li> <li>2-3 Solve Equations Using the Distributive Property (7.EE.2.3, 7.EE.2.4a)</li> <li>2-4 Solve Inequalities Using Addition and Subtraction (7.EE.2.4b)</li> <li>2-5 Solve Inequalities Using Multiplication or Division (7.EE.2.4b)</li> </ul>	Solving Two Step Equations – <a href="#">Khan Academy</a> Two Step Equations Problems – <a href="#">Khan Academy</a> Distributive Property – <a href="#">Khan Academy</a> Solving Inequalities – <a href="#">Khan Academy</a>
	6 9/16 – 9/20	<ul style="list-style-type: none"> <li>3-Act Mathematical Modeling: Digital Downloads (7.EE.2.3, 7.EE.2.4)</li> <li>2-6 Solve Two Step Inequalities (7.EE.2.4b)</li> <li>2-7 Solve Multi-Step Inequalities (7.EE.2.4b)</li> </ul>	Solve Two Step Inequalities - <a href="#">Khan Academy</a> Solve Multi-Step Inequalities - <a href="#">Khan Academy</a> Expressions, Equations, and Inequalities Review - <a href="#">Khan Academy</a>
	7 9/23 – 9/27	<ul style="list-style-type: none"> <li>3-1 Combine Like Terms to Solve Equations (8.EE.3.7b)</li> <li>3-2 Solve Equations with Variables on Both Sides (8.EE.3.7b)</li> </ul>	Intro to Combining Like Terms - <a href="#">Khan Academy</a> Solve Equations on Both Sides Practice - <a href="#">Khan Academy</a>

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	<p>8 9/30 – 10/4</p>	<ul style="list-style-type: none"> <li>• 3-3 Solve Multistep Equations (8.EE.3.7b)</li> <li>• 3-4 Equations with No Solutions or Infinitely Many Solutions (8.EE.3.7a)</li> <li>• 3-Act Mathematical Modeling: Powering Down (8.EE.3.7a, 8.EE.3.7b)</li> <li>• 3-5 Compare Proportional Relationships (8.EE.2.5)</li> <li>• 3-6 Connect Proportional Relationships and Slope (8.EE.2.6)</li> </ul>	<p>Solve Equations with Parenthesis - <a href="#">Khan Academy</a></p> <p>Solve Equations with Parenthesis, Decimals, and Fractions - <a href="#">Khan Academy</a></p> <p>Create Equations with No Solutions or Infinitely Many - <a href="#">Khan Academy</a></p> <p>Rate and Proportional Relationships – <a href="#">Khan Academy</a></p> <p>Graphing Proportional Relationships - <a href="#">Khan Academy</a></p>
	<p>9 10/7 – 10/11</p>	<ul style="list-style-type: none"> <li>• 3-7 Analyze Linear Equations: <math>y = mx</math> (8.EE.2.6)</li> <li>• 3-8 Understand the <math>y</math>-intercept of a line (8.EE.2.6)</li> <li>• 3-9 Analyze Linear Equations: <math>y = mx + b</math> (8.EE.2.6)</li> </ul>	<p>Solutions to Linear Equations - <a href="#">Khan Academy</a></p> <p>Slope Intercept Form - <a href="#">Khan Academy</a></p> <p>Graphing Slope Intercept Form - <a href="#">Khan Academy</a></p> <p>Slope Intercept Form Review - <a href="#">Khan Academy</a></p>

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Quarter 2 Oct 15 – Dec 20	1 10/15 – 10/18	<ul style="list-style-type: none"> <li>4-1 Understand Relations and Functions (8.F.1.1)</li> </ul>	Relations and Functions - <a href="#">Khan Academy</a>
	2 10/21 – 10/25	<ul style="list-style-type: none"> <li>4-2 Connect Representations of Functions (8.F.1.1)</li> <li>4-3 Compare Linear and Nonlinear Functions (8.F.1.3, 8.F.1.2)</li> <li>3-Act Mathematical Modeling: Every Drop Counts (8.F.2.4, 8.F.1.2)</li> <li>4-4 Construct Functions to Model Linear Relationships (8.F.2.4, 8.F.1.2)</li> <li>4-5 Intervals of Increase and Decrease (8.F.2.5)</li> </ul>	Evaluate Functions - <a href="#">Khan Academy</a> Evaluate Functions from Their Graphs - <a href="#">Khan Academy</a> Function Rules From Equations – <a href="#">Khan Academy</a> Linear and Nonlinear Functions - <a href="#">Khan Academy</a> Modeling With Linear Functions - <a href="#">Khan Academy</a> Practice Linear Equations - <a href="#">Khan Academy</a> Increase/Decrease Intervals - <a href="#">Khan Academy</a>
	3 10/28 – 11/1	<ul style="list-style-type: none"> <li>4-6 Sketch Functions from Verbal Descriptions (8.F.2.5)</li> </ul>	Recognizing Functions From Verbal Descriptions - <a href="#">Khan Academy</a>
	4 11/4 – 11/8	<ul style="list-style-type: none"> <li>5-1 Construct and Interpret Scatter Plots (8.SP.1.1)</li> <li>5-2 Analyze Linear Associations (8.SP.1.2, 8.F.1.3, 8.F.2.4)</li> <li>5-3 Use Linear Models to Make Predications (8.SP.1.3, 8.F.1.3, 8.F.2.4)</li> <li>5-4 Interpret Two-Way Frequency Tables (8.SP.1.4)</li> </ul>	Constructing Scatter Plots - <a href="#">Khan Academy</a> Construct/Interpret Scatter Plots - <a href="#">Khan Academy</a> Analyze Positive and Negative Linear Associations from Scatter Plots - <a href="#">Khan Academy</a> Estimating Equations of Lines of Best Fit/Using Them to Make Predictions - <a href="#">Khan Academy</a> Interpreting Two Way Tables - <a href="#">Khan Academy</a>
	5 11/12 – 11/15	<ul style="list-style-type: none"> <li>Veterans Day (11/11)</li> <li>5-5 Interpret Two-Way Relative Frequency Tables (8.SP.1.4)</li> <li>3-Act Mathematical Modeling: Reach Out (8.SP.1.1, 8.SP.1.2, 8.SP.1.3)</li> </ul>	Interpreting Two Way Tables Practice - <a href="#">Khan Academy</a>
	6 11/18 – 11/22	<ul style="list-style-type: none"> <li>6-1 Estimate Solutions by Inspection (8.EE.3.8b, 8.EE.3.8c)</li> <li>6-2 Solve Systems by Graphing (8.EE.3.8a, 8.EE.3.8c)</li> </ul>	Solutions of Systems of Equations - <a href="#">Khan Academy</a>

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			Solving Systems of Equations by Graphing - <a href="#">Khan Academy</a>
7 11/25 – 11/26	<ul style="list-style-type: none"> <li>Thanksgiving Holiday (11/27 - 11/29)</li> </ul>		
8 12/2 – 12/6	<ul style="list-style-type: none"> <li>6-3 Solve Systems by Substitution (8.EE.3.8b, 8.EE.3.8c)</li> <li>6-4 Solve Systems by Elimination (8.EE.3.8b, 8.EE.3.8c)</li> <li>3-Act Mathematical Modeling: Ups and Downs (8.EE.3.8, 8.SP.1.3, 8.F.2.4)</li> </ul>		Solve Systems by Substitutions - <a href="#">Khan Academy</a> Solve Systems by Elimination - <a href="#">Khan Academy</a>
9 12/9 – 12/13	<ul style="list-style-type: none"> <li>7-1 Analyze Translations (8.G.1.1a, 8.G.1.1b, 8.G.1.1c, 8.G.1.3)</li> <li>7-2 Analyze Reflections (8.G.1.1a, 8.G.1.1b, 8.G.1.1c, 8.G.1.3)</li> </ul>		Analyzing Translations - <a href="#">Khan Academy</a> Analyzing Reflections - <a href="#">Khan Academy</a>
10 12/16 – 12/20	<ul style="list-style-type: none"> <li>7-3 Analyze Rotations (8.G.1.1a, 8.G.1.1b, 8.G.1.1c, 8.G.1.3)</li> <li>7-4 Compose Transformations (8.G.1.1a, 8.G.1.1b, 8.G.1.1c, 8.G.1.3)</li> </ul>		Analyzing Rotations - <a href="#">Khan Academy</a> Transformations Practice - <a href="#">Khan Academy</a>

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Quarter 3 Jan 6 – Mar 12	1 1/6– 1/10	<ul style="list-style-type: none"> <li>3-Act Mathematical Modeling: Tricks of the Trade (8.G.1.1, 8.G.1.2)</li> <li>7-5 Understand Congruent Figures (8.G.1.2, 8.G.1.3)</li> <li>7-6 Describe Dilations (8.G.1.3, 8.G.1.4)</li> <li>7-7 Understand Similar Figures (8.G.1.3, 8.G.1.4)</li> <li>7-8 Angles, Lines, and Transversals (8.G.1.5)</li> </ul>	Understand Congruent Figures - <a href="#">Khan Academy</a> Dilations and Properties - <a href="#">Khan Academy</a> Similar Shapes and Transformations - <a href="#">Khan Academy</a> Angles, Lines, and Transversals - <a href="#">Khan Academy</a>
	2 1/13 – 1/17	<ul style="list-style-type: none"> <li>7-9 Interior and Exterior Angles of Triangles (8.G.1.5)</li> <li>7-10 Angle-Angle Triangle Similarity (8.G.1.5)</li> </ul>	Find Angles in Triangles - <a href="#">Khan Academy</a> Triangle Similarity Postulates - <a href="#">Khan Academy</a>
	3 1/21 – 1/24	<ul style="list-style-type: none"> <li>3-Act Mathematical Modeling: Go with the Flow (8.G.2.6)</li> <li>8-1 Understand Pythagorean Theorem (8.G.2.6, 8.G.2.7)</li> </ul>	Introduction to Pythagorean Theorem - <a href="#">Khan Academy</a>
	4 1/27 – 1/30	<ul style="list-style-type: none"> <li>8-2 Understand the Converse of the Pythagorean Theorem (8.G.2.6, 8.G.2.7)</li> <li>8-3 Apply the Pythagorean Theorem to Solve Problems (8.G.2.7)</li> <li>8-4 Find Distance in the Coordinate Plane (8.G.2.8)</li> </ul>	Apply Pythagorean Theorem to Solve Problems - <a href="#">Khan Academy</a> Find Distance in Coordinate Planes - <a href="#">Khan Academy</a>
	5 2/3 – 2/7	<ul style="list-style-type: none"> <li>9-1 Solve Problems Involving Scale Drawings (7.G.1.1)</li> </ul>	Solve Word Problems Involving Scale Drawings - <a href="#">Khan Academy</a>
	6 2/10 – 2/14	<ul style="list-style-type: none"> <li>9-2 Draw Geometric Figures (7.G.1.2)</li> <li>9-3 Draw Triangles with Given Conditions (7.G.1.2)</li> <li>9-4 Solve Problems Using Angle Relationships (7.G.2.5)</li> <li>9-5 Solve Problems Involving Circumference of a Circle (7.G.2.4, 7.EE.2.4a)</li> <li>9-6 Solve Problems Involving Area of a Circle (7.G.2.4, 7.EE.2.3, 7.EE.2.4a)</li> </ul>	Constructing Triangles - <a href="#">Khan Academy</a> Introduction to Angle Relationships - <a href="#">Khan Academy</a> Circumference Review - <a href="#">Khan Academy</a> Determine Area of a Circle - <a href="#">Khan Academy</a>
	7 2/17 – 2/21	<ul style="list-style-type: none"> <li>Presidents Day Holiday 2/17</li> <li>3-Act Mathematical Modeling: Whole Lotta Dough (7.G.2.4)</li> <li>9-7 Describe Cross Sections (7.G.1.3)</li> </ul>	Solve Word Problems Involving Surface area - <a href="#">Khan Academy</a>

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		<ul style="list-style-type: none"> <li>9-8 Solve Problems Involving Surface Area (7.G.2.6, 7.NS.1.3, 7.EE.2.3, 7.EE.2.4a)</li> <li>9-9 Solve Problems Involving Volume (7.G.2.6, 7.NS.1.3, 7.EE.2.3, 7.EE.2.4a)</li> </ul>	Solve World Problems for Volume of Cylinders, Spheres, and Cones - <a href="#">Khan Academy</a>
8 2/24 – 2/28		<ul style="list-style-type: none"> <li>9 Solve Problems Involving Geometry</li> </ul>	<b>Review lessons and videos from topics 9-1 – 9-9</b>
9 3/2 – 3/6		<ul style="list-style-type: none"> <li>10-1 Find Surface Area of Three-Dimensional Figures (8.G.3.9)</li> <li>10-2 Find Volume of Cylinders (8.G.3.9)</li> <li>10-3 Find Volume of Cones (8.G.3.9)</li> <li>10-4 Find Volume of Spheres (8.G.3.9)</li> <li>3-Act Mathematical Modeling: Measure Up (8.G.3.9)</li> </ul>	Surface Area Using a Net: Triangular Prism - <a href="#">Khan Academy</a> Find Volume of Cylinders, Cones, and Spheres - <a href="#">Khan Academy</a>
10 3/9 – 3/12		<ul style="list-style-type: none"> <li>10 Solve Problems Involving Surface Area and Volume</li> </ul>	<b>Review lessons and videos from topics 10-1 – 10-4</b>

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Quarter 4 Mar 23 – May 27	1 3/16 – 3/20	<ul style="list-style-type: none"> <li>• <b>SPRING BREAK – NO SCHOOL</b></li> </ul>	
	2 3/23 – 3/27	<ul style="list-style-type: none"> <li>• 11-1 Populations and Samples (7.SP.1.1)</li> <li>• 11-2 Draw Inferences From Data (7.SP.1.1, 7.SP.1.2, 7.RP.1.2c, 7.EE.2.3)</li> <li>• 11-3 Make Comparative Inferences About Populations (7.SP.2.3, 7.SP.2.4)</li> <li>• 11-4 Make More Comparative Inferences About Populations (7.SP.2.3, 7.SP.2.4)</li> </ul>	Comparing and Sampling Populations - <a href="#">Khan Academy</a> Draw Inferences from Data - <a href="#">Khan Academy</a> Make Inferences from Random Samples - <a href="#">Khan Academy</a>
	3 3/30 – 4/3	<ul style="list-style-type: none"> <li>• 3-Act Mathematical Modeling: Raising Money (7.SP.1.1, 7.SP.1.2, 7.RP.1.3)</li> </ul>	
	4 4/6 – 4/9	<ul style="list-style-type: none"> <li>• Holiday 4/10</li> <li>• 12-1 Understand Likelihood and Probability (7.SP.3.5, 7.EE.2.3)</li> <li>• 12-2 Understand Theoretical Probability (7.SP.3.6, 7.RP.1.2c)</li> <li>• 12-3 Understand Experimental Probability (7.SP.3.6, 7.SP.3.7)</li> </ul>	Simple Probability - <a href="#">Khan Academy</a> Understanding Theoretical Probability - <a href="#">Khan Academy</a> Experimental Probability vs. Theoretical Probability - <a href="#">Khan Academy</a>
	5 4/14 – 4/17	<ul style="list-style-type: none"> <li>• Holiday 4/13</li> <li>• 12-4 Use Probability Models (7.SP.3.7a, 7.SP.3.7b, 7.EE.2.3)</li> <li>• 3-Act Mathematical Modeling: Photo Finish (7.SP.3.5, 7.SP.3.6, 7.SP.3.7)</li> <li>• 12-5 Determine Outcomes of Compound Events (7.SP.3.8b)</li> <li>• 12-6 Find Probabilities of Compound Events (7.SP.3.8a)</li> </ul>	Determine Results of Simulations Using Probability Models - <a href="#">Khan Academy</a> Probability of a Compound Event Introduction - <a href="#">Khan Academy</a> Find Probabilities of Compound Events - <a href="#">Khan Academy</a>
	6 4/20 – 4/24	<ul style="list-style-type: none"> <li>• 12-7 Simulate Compound Events (7.SP.3.8c)</li> </ul>	The Counting Principle - <a href="#">Khan Academy</a>
	7 4/27 – 5/1	<ul style="list-style-type: none"> <li>• 12 Probability</li> </ul>	<b>Review lessons and videos from topics 12-1 – 12-7</b>
	8 5/4 – 5/8	<ul style="list-style-type: none"> <li>• Standards Review</li> </ul>	
	9	<ul style="list-style-type: none"> <li>• Standards Review</li> </ul>	

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	5/11 – 5/15		
	10 5/18 – 5/22	<ul style="list-style-type: none"><li>Standards Review</li></ul>	
	11 5/25 – 5/27	<ul style="list-style-type: none"><li>Standards Review</li></ul>	

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