

## Priority Instructional Content for enVision® Algebra 2 Common Core c2018

Produced by Student Achievement Partners, the *2020–2021 Support for Instructional Content Prioritization in High School Mathematics* names the priorities in high school mathematics that should be the focus of instruction for educators in the coming academic year. Instructional considerations include priorities in each course, opportunities for combining lessons, eliminating lessons, etc.

In the chart below, these instructional considerations are matched to **enVision Algebra 2 Topics**. Specific recommendations as to how these considerations can be implemented are also provided.

Topic Titles	Common Core Standards	Instructional Considerations	Recommendations for enVision Algebra 1 c2018
<p><b>Topic 1</b> Linear Functions and Systems</p>	HSA.CED.A.1 HSA.CED.A.3 HSA.REI.C.6 HSA.REI.D.11 HSF.BF.A.1 HSF.BF.A.1.A HSF.BF.A.2 HSF.BF.B.3 HSF.IF.A.3 HSF.IF.B.4 HSF.IF.B.5 HSF.IF.B.6 HSF.IF.C.7 HSF.IF.C.7.B HSF.LE.A.2 HSS.ID.B.6.A	<p>Focus instructional emphasis on key features of functions, transformations of functions, and solving equations and inequalities.</p> <p>Reduce instructional time on arithmetic sequence and series, focusing on key concepts only.</p> <p>Eliminate instruction of Step Functions (HSF.IF.C.7.B) and using matrices to solve linear systems.</p>	<p><b>Lesson 1, Lesson 2, Lesson 5</b> No special considerations for curricula. Time spent on instruction and practice should NOT be reduced.</p> <p><b>Lesson 3</b> Eliminate Example 5 Step Functions to save time.</p> <p><b>Lesson 4</b> Reduce instructional time on this lesson, focusing on key concepts only.</p> <p><b>Lesson 6</b> Eliminate Lesson 6; content covered in Algebra 1 Topic 4.</p> <p><b>Lesson 7</b> Eliminate this lesson to save time; this content is not typically not taught in high school AGA.</p>
<p><b>Topic 2</b> Quadratic Functions and Equations</p>	HSA.APR.B.3 HSA.CED.A.2 HSA.REI.B.4 HSA.REI.B.4.A HSA.REI.B.4.B HSA.REI.C.7 HSA.REI.D.11 HSA.SSE.A.2 HSA.SSE.B.3.A HSF.BF.B.3 HSF.IF.B.4 HSN.CN.A.1 HSN.CN.A.2 HSN.CN.A.3 (+) HSN.CN.C.7 HSS.ID.B.6 HSS.ID.B.6.A	<p>Focus instructional emphasis on understand and solving quadratic functions, including various forms and solution methods.</p> <p>Reduce instructional time on complex numbers, addressing key concepts while solving quadratics. Reduce repetitious practice problems that would typically be assigned.</p> <p>Eliminate instruction on Linear-Quadratic Systems (HSA.REI.C.7).</p>	<p><b>Lesson 1, Lesson 2, Lesson 3</b> No special considerations for curricula. Time spent on instruction and practice should NOT be reduced.</p> <p><b>Lesson 4</b> Reduce instructional time on this lesson, address key concepts in Lessons 5 and 6. Eliminate Example 4 (Conjugates).</p> <p><b>Lesson 5 and Lesson 6</b> Reduce repetitious practice problems that would typically be assigned.</p> <p><b>Lesson 7</b> Eliminate this lesson to save time. This content is not prioritized for high school AGA.</p>

<p><b>Topic 3</b> Polynomial Functions</p>	<p>HSA.APR.A.1 HSA.APR.B.2 HSA.APR.B.3 HSA.APR.C.4 HSA.APR.C.5 (+) HSA.APR.D.6 HSA.SSE.A.2 HSF.BF.A.1.B HSF.BF.B.3 HSF.IF.B.4 HSF.IF.B.6 HSF.IF.C.7.C HSF.IF.C.9 HSN.CN.C.8 (+) HSN.CN.C.9 (+)</p>	<p>Focus instructional emphasis on graphing, including finding zeros, of polynomial functions and transformations on polynomial functions.</p> <p>Prioritize multiplying polynomials over adding and subtracting polynomials.</p> <p>Eliminate instruction related to polynomial identities (HAS.APR.C.4, HAS.APR.C.5+).</p>	<p><b>Lesson 1, Lesson 7</b> No special considerations for curricula. Time spent on instruction and practice should NOT be reduced.</p> <p><b>Lesson 2</b> Prioritize multiplying polynomials.</p> <p><b>Lesson 3, Lesson 6</b> Eliminate these lessons to save time. This content is not prioritized for high school AGA.</p> <p><b>Lesson 4 and Lesson 5</b> Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.</p>
<p><b>Topic 4</b> Rational Functions</p>	<p>HSA.APR.D.6 HSA.APR.D.7(+) HSA.CED.A.1 HSA.CED.A.2 HSA.REI.A.1 HSA.REI.A.2 HSA.REI.D.11 HSA.SSE.A.2 HSF.BF.B.3 HSF.IF.C.7.D (+)</p>	<p>Focus instructional emphasis on inverse variation, the reciprocal function, and solving rational equations.</p> <p>Eliminate instruction related to graphing rational functions HSF.IF.C.7.D (+) and operations on rational expressions (HAS.APR.D.7+).</p>	<p><b>Lesson 1, Lesson 5</b> No special considerations for curricula. Time spent on instruction and practice should NOT be reduced.</p> <p><b>Lesson 2, Lesson 3, Lesson 4</b> Eliminate these lessons to save time. This content is not prioritized for high school AGA.</p>
<p><b>Topic 5</b> Rational Exponents and Radical Functions</p>	<p>HSA.CED.A.4 HSA.REI.A.1 HSA.REI.A.2 HSA.SSE.A.1 HSA.SSE.A.2 HSF.BF.A.1.B HSF.BF.A.1.C (+) HSF.BF.B.3 HSF.BF.B.4 HSF.BF.B.4.A HSF.BF.B.4.B (+) HSF.BF.B.4.C (+) HSF.BF.B.4.D (+) HSF.IF.B.4 HSF.IF.C.7.B HSN.RN.A.1 HSN.RN.A.2</p>	<p>Focus instructional emphasis on rewriting radical expressions, graphing radical functions, and solving radical equations, reducing repetitious practice problems related to rewriting expressions involving radicals and rational exponents that would typically be assigned.</p> <p>Eliminate instruction related to combining functions using arithmetic operations and using composition to verify inverse functions.</p>	<p><b>Lesson 1, Lesson 2</b> Prioritize instructional emphasis, reducing repetitious practice problems related to rewriting expressions involving radicals and rational exponents that would typically be assigned.</p> <p><b>Lesson 3</b> Emphasize square root and cube root functions.</p> <p><b>Lesson 4</b> No special considerations for curricula. Time spent on instruction and practice should NOT be reduced.</p> <p><b>Lesson 5</b> Eliminate this lesson to save time. This content is not prioritized for high school AGA.</p> <p><b>Lesson 6</b> Eliminate Example 5 (Using Composition to Verify Inverse Functions); reduce the number of repetitious practice problems that would normally be assigned to students.</p>

<p><b>Topic 6</b> Exponential and Logarithmic Functions</p>	<p>HSA.CED.A.1 HSA.REI.A.1 HSA.SSE.A.1.B HSA.SSE.A.2 HSA.SSE.B.3.C HSA.SSE.B.4 HSF.BF.A.1 HSF.BF.A.1.A HSF.BF.A.2 HSF.BF.B.3 HSF.BF.B.4 HSF.BF.B.4.A HSF.BF.B.4.C (+) HSF.BF.B.5 (+) HSF.IF.A.3 HSF.IF.B.4 HSF.IF.B.5 HSF.IF.B.6 HSF.IF.C.7.E HSF.IF.C.8 HSF.IF.C.8.B HSF.IF.C.9 HSF.LE.A.2 HSF.LE.A.4 HSF.LE.B.5 HSS.ID.B.6.A</p>	<p>Focus instructional emphasis on exponential functions and properties of logarithms and logarithmic functions.</p> <p>Eliminate instruction related to exponential models and geometric sequences and series.</p>	<p><b>Lesson 1, Lesson 4</b> No special considerations for curricula. Time spent on instruction and practice should NOT be reduced.</p> <p><b>Lesson 2, Lesson 7</b> Eliminate this lesson to save time. This content is not prioritized for high school AGA.</p> <p><b>Lesson 3, Lesson 5, Lesson 6</b> Reduce the number of repetitious practice problems that would normally be assigned to students.</p>
<p><b>Topic 7</b> Trigonometric Functions</p>	<p>HSF.BF.B.3 HSF.IF.B.4 HSF.IF.B.6 HSF.IF.C.7e HSF.IF.C.9 HSF.TF.A.1 HSF.TF.A.2 HSF.TF.A.3 (+) HSF.TF.B.5 HSF.TF.C.8</p>	<p>Focus instructional emphasis on concepts related to unit circles, radian measure, and choosing trigonometric functions to model periodic phenomena.</p> <p>Eliminate instruction related to proving and using the Pythagorean Identity, using special right triangles to determine sine, cosine, tangent of angles given in radian measure.</p>	<p><b>Lesson 1</b> Eliminate this lesson; this content is covered in Geometry Topic 8 Lesson 2.</p> <p><b>Lesson 2</b> Prioritize instructional emphasis on understanding unit circle concepts and radian measure.</p> <p><b>Lesson 3</b> Eliminate Example 2 Use the Pythagorean Identity and related practice items to allow more time to focus on priority content of the lesson.</p> <p><b>Lesson 4, Lesson 5</b> Prioritize instructional emphasis, focusing on choosing trigonometric functions to model periodic phenomena.</p> <p><b>Lesson 6</b> Reduce the number of repetitious practice problems that would normally be assigned to students.</p>
<p><b>Topic 8</b> Trigonometric Equations and Identities</p>	<p>HSA.SSE.A.2 HSF.BF.B.4.D (+) HSF.TF.A.3 (+) HSF.TF.A.4 (+) HSF.TF.B.6 (+) HSF.TF.B.7 (+) HSF.TF.C.9 (+) HSG.SRT.D.10 (+) HSG.SRT.D.11 (+) HSN.CN.A.3 (+) HSN.CN.B.4 (+) HSN.CN.B.5 (+) HSN.CN.B.6 (+)</p>	<p>Eliminate instruction related to solving trigonometric equations using inverses, the law of sines and cosines, trigonometric identities, and representing complex numbers and their operations on the complex plane.</p>	<p><b>Topic 8</b> Eliminate all Lessons 1–5; this topic content is not typically an expectation of high school Algebra 2.</p>

<p><b>Topic 9</b> Conic Sections</p>	<p>HSA.REI.C.7 HSA.SSE.A.2 HSA.SSE.B.3 HSG.GPE.A.1 HSG.GPE.A.2 HSG.GPE.A.3 (+)</p>	<p>Eliminate instruction that requires deriving the equation of a parabola, a circle, an ellipse, or a hyperbola.</p>	<p><b>Topic 9</b> Eliminate all Lessons 1–4; this topic content is not typically an expectation of high school Algebra 2.</p>
<p><b>Topic 10</b> Matrices</p>	<p>HSA.CED.A.3 HSA.REI.C.8 (+) HSA.REI.C.9 (+) HSN.VM.A.1 (+) HSN.VM.A.2 (+) HSN.VM.A.3 (+) HSN.VM.B.4 (+) HSN.VM.B.4.A (+) HSN.VM.B.4.B (+) HSN.VM.B.5 (+) HSN.VM.B.5.A (+) HSN.VM.B.5.B (+) HSN.VM.C.6 (+) HSN.VM.C.7 (+) HSN.VM.C.8 (+) HSN.VM.C.9 (+) HSN.VM.C.10 (+) HSN.VM.C.11 (+) HSN.VM.C.12 (+)</p>	<p>Vector Quantities and Matrices are not included in AGA.</p>	<p><b>Topic 10</b> Eliminate all Lessons 1–5; this topic content is not typically an expectation of high school Algebra 2.</p>
<p><b>Topic 11</b> Data Analysis and Statistics</p>	<p>HSN.Q.A.2 HSS.IC.A.1 HSS.IC.A.2 HSS.IC.B.3 HSS.IC.B.4 HSS.IC.B.5 HSS.IC.B.6 HSS.ID.A.2 HSS.ID.A.4</p>	<p>Combine lessons focused on Making inferences and justifying conclusions from sample surveys, experiments, and observational studies (S-IC.B.3, S-IC.B.4, S-IC.B.5, and S-IC.B.6) to address key concepts and reduce the amount of time spent on these standards. Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.</p>	<p><b>Lesson 1</b> Prioritize instructional emphasis. <b>Lesson 2, Lesson 4, Lesson 5, and Lesson 6</b> Combine lesson content as possible, focusing on key concepts. Reduce the number of repetitious practice problems that would normally be assigned to students for this topic. <b>Lesson 3</b> (Data Distributions) Reduce instructional time or eliminate; this content is addressed in Algebra 1 Topic 11 Lesson 4.</p>
<p><b>Topic 12</b> Probability</p>	<p>HSS.CP.A.1 HSS.CP.A.2 HSS.CP.A.3 HSS.CP.A.4 HSS.CP.A.5 HSS.CP.B.6 HSS.CP.B.7 HSS.CP.B.8 (+) HSS.CP.B.9 (+) HSS.MD.A.1 (+) HSS.MD.A.2 (+) HSS.MD.A.3 (+) HSS.MD.A.4 (+) HSS.MD.B.5 (+) HSS.MD.B.5.A (+) HSS.MD.B.5.B (+) HSS.MD.B.6 (+) HSS.MD.B.7 (+)</p>	<p>Probability concepts and skills are covered thoroughly in Geometry.</p>	<p><b>Topic 12</b> Eliminate all Lessons 1–6; this topic content is addressed in Geometry Topic 12.</p>