

Illinois Model Curriculum Scope & Sequence

Math 2

Unit	Focus Standards	Connecting Standards	Time Frame (Approx.)
<b>1) Extending the Number System</b>	N.RN.1 (Properties of rational exponents) N.RN.2 (Rational exponents and radical expressions) N.RN.3 (Irrational and rational numbers) A.APR.1 (Operating on polynomials) A.SSE.1b (Represent parts as a single entity) A.SSE.2 (Use structure to identify) N.CN.1 (Definition of complex number) N.CN.2 (Operations with $i$ )		4-5 weeks
<b>2) Quadratic Functions: Representations &amp; Transformations</b>	F.IF.7a (Show key features) F.IF.4 (Key features) F.IF.9 (Compare functions) F.BF.3 (Algebraic Transformations) F.IF.6 (Average rate of change)		2 weeks
<b>3) Quadratic Functions: Working with Equations</b>	A.SSE.3a (Factor quadratics) A.SSE.3b (Complete the square) A.CED.1 (Create and solve 1 variable equations) A.CED.2 (Create and solve 2 variable equations) A.CED.4 (Rearrange expressions) A.REI.1 (Explain steps of solving) A.REI.4a (Solve by completing the square/quadratic formula) A.REI.4b (Solve by inspection) N.CN.7 (quadratic formula with negative discriminates) A.REI.7 (systems of quadratics and linear)	A.SSE.1b (interpret expressions) A.SSE.2 (use structure to identify) N.Q.2 (appropriate quantities) F.IF.8a (equivalent forms show what on a graph)	4-5 weeks
<b>4) Quadratic Functions: Modeling</b>	F.IF.4 (key features) F.IF.5 (relate domain to application) F.IF.6 (average rate of change) F.IF.7a (key features) F.IF.8a (equivalent forms show what on a graph) F.IF.9 (compare different representations) F.BF.1a (write a function) F.BF.1b (combine standard functions arithmetically)	A.CED.4 (rearrange equations)	2-3 weeks

Major Standards

Supporting Standards

Additional Standards

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<b>5) Comparing Functions and Modeling</b>	<p>F.IF.6(average rate of change)                  F.LE.3 (compare linear and quadratic)                  F.IF.7a(key features)                  F.IF.7e(exponential graphs)                  S.ID.6a (fit a function to data)                  S.ID.6b (analyzing residuals)                  F.IF.8b(properties of exponents for exponential functions)                  F.IF.9 (compare different representations)                  F.BF.3(Algebraic Transformations)</p>	<p>F.BF.1a(relationships between functions)                  F.IF.8a(different forms show what on graph)</p>	2-3 weeks
<b>6) Similarities and Volume</b>	<p>G.SRT.1(center &amp; factor for dilation)                  G.SRT.2(similarity in terms of dilation)                  G.SRT.3(establish AA~)                  G.SRT.4(side-splitter, Pythagorean, proof by similarity)                  G.SRT.5(solve with similarity)                  G.GMD.1(arguments for volume formula)                  G.GMD.3(use volume formulas)</p>		4-5 weeks
<b>7) Right Triangles and Trigonometry</b>	<p>G.SRT.6(understand sides are related to angles in right triangles)                  G.SRT.7(relationship sin and cos)                  G.SRT.8(apply trig ratios)</p>		2-3 weeks
<b>8) Probability</b>	<p>S.CP.1(events and subsets)                  S.CP.2(def of independent)                  S.CP.3(<math>P(A \text{ and } B)/P(B)</math>)                  S.CP.4(two way frequency tables)                  S.CP.5(conditional &amp; independent in everyday language)                  S.CP.6(conditional prob of A given B)                  S.CP.7 ( addition rule)</p>		3-4 weeks
<b>9) Circles</b>	<p>G.C.1(circles are similar)                  G.C.2(relationships in circles)                  G.C.3 (inscribed and circumscribe polygons)                  G.C.5 (arch length and sector area)                  G.CO.12 (constructions)                  G.CO.13(constructions)                  G.GPE.1 (circle formula)</p>	<p>A.SSE.3(equivalent forms)</p>	4-5 weeks

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