

**Algebra 1 CP**  
**Chapter 7 – Exponents and Exponential Functions**

<b>Power Hour</b>	<b>Date</b>	<b>Section</b>	<b>Suggested Practice</b>
	W 2/12	<p style="text-align: center;"><b>7-1 Multiplication Properties of Exponents</b></p> <p><i>Objectives:</i></p> <ul style="list-style-type: none"> <li>• Multiply monomials using the properties of exponents.</li> <li>• Simplify expressions using the multiplication properties of exponents.</li> </ul> <p><i>Essential Questions:</i></p> <ul style="list-style-type: none"> <li>• Why is an expression that uses addition or subtraction not considered a monomial?</li> <li>• Why is the greatest number of times the same variable will appear in a simplified monomial?</li> <li>• What operation will you not see in a monomial?</li> </ul> <p><i>Standards:</i> A1.ASE.1, A1.FIF.8, MP8</p>	Page 399, #21, 23, 25, 29, 31, 33, 35, 39, 47, 59
	Th 2/13	<b>TI-Nspire Activity</b>	None
	F 2/14	<p style="text-align: center;"><b>7-2 Division Properties of Exponents</b></p> <p><i>Objectives:</i></p> <ul style="list-style-type: none"> <li>• Divide monomials using the properties of exponents.</li> <li>• Simplify expressions containing negative and zero exponents.</li> </ul> <p><i>Essential Questions:</i></p> <ul style="list-style-type: none"> <li>• How can an expression containing multiple variables be rewritten as the multiplication of separate fractions?</li> <li>• In an expression raised to the 0 power, is it necessary to apply the exponent of 0 to each individual part?</li> </ul> <p><i>Standards:</i> A1.ASE.2, A1.FIF.8, MP3</p>	Page 407, #19, 23, 29, 31, 35, 37, 49, 50, 57
	T 2/18		Complete worksheet
	W 2/19	<p style="text-align: center;"><b>7-3 Rational Exponents</b></p> <p><i>Objectives:</i></p> <ul style="list-style-type: none"> <li>• Evaluate and rewrite expressions involving rational exponents.</li> <li>• Solve equations involving expressions with rational exponents.</li> </ul> <p><i>Essential Questions:</i></p> <ul style="list-style-type: none"> <li>• Which part of a rational exponent indicates what the index of the radical symbol will be?</li> <li>• How do the results compare when a base is raised to an improper fraction versus when a base is raised to a proper fraction?</li> <li>• How do you know whether an exponent applies to the coefficient or just to the variable?</li> </ul> <p><i>Standards:</i> A1.NRNS.1, A1.NRNS.2, MP5</p>	Page 414, #3, 5, 7, 17, 19, 25, 27, 33, 37, 41
	Th 2/20	<b>Review of Lessons 7.1 – 7.3</b>	Study for quiz

	F 2/21	<b>Quiz on Lessons 7.1 – 7.3</b>	None
	M 2/24	<p align="center"><b>7-4 Radical Expressions</b></p> <p><i>Objectives:</i></p> <ul style="list-style-type: none"> <li>Simplify square roots by applying Product and Quotient Properties of square roots.</li> <li>Add, subtract, and multiply radical expressions.</li> </ul> <p><i>Essential Questions:</i></p> <ul style="list-style-type: none"> <li>Why are finding factors of the radicand necessary for simplifying radicals?</li> <li>What must be true of the radicands in order to combine terms?</li> </ul> <p><i>Standards:</i> A1.NRNS.1, MP6, MP7, MP8</p>	<p>Page 424, #1, 3, 5, 7, 9</p> <p>Page 425, #31, 33, 35, 37, 39</p>
	T 2/25	<b>ACT Testing Lesson 7.4 Practice</b>	None
	W 2/26	<p align="center"><b>7-5 Exponential Functions</b></p> <p><i>Objectives:</i></p> <ul style="list-style-type: none"> <li>Graph exponential functions.</li> <li>Identify data that display exponential behavior.</li> </ul> <p><i>Essential Questions:</i></p> <ul style="list-style-type: none"> <li>When is a function exponential growth?</li> <li>When is a function exponential decay?</li> <li>What is the domain of an exponential function?</li> <li>What is the range of an exponential function?</li> </ul> <p><i>Standards:</i> A1.FIF.1, A1.FIF.7, A1.FLQE.5, MP1</p>	<p>Page 433, #1, 3, 9, 21, 23, 25</p>
	Th 2/27		<p>Complete worksheet</p>
	M 3/2	<p align="center"><b>7-6 Transformations of Exponential Functions</b></p> <p><i>Objectives:</i></p> <ul style="list-style-type: none"> <li>Identify the effects on the graphs of exponential functions by replacing <math>f(x)</math> with <math>f(x) + k</math> and <math>f(x-h)</math> for positive and negative values of <math>h</math> and <math>k</math>.</li> <li>Identify the effects on the graphs of exponential functions by replacing <math>f(x)</math> with <math>a * f(x)</math> and <math>f(ax)</math> with positive and negative values of <math>a</math>.</li> </ul> <p><i>Essential Questions:</i></p> <ul style="list-style-type: none"> <li>In which quadrants is the graph of <math>f(x) = b^x</math> for any positive value of <math>b</math>?</li> <li>If <math>f(x) = b^x</math> is multiplied by a negative number, in which quadrants will the graph be?</li> <li>Why is the <math>y</math>-intercept a good reference point when determining a translation?</li> </ul> <p><i>Standards:</i> A1.FBF.3, A1.NQ.3, MP2, MP4</p>	<p>Page 443, #1, 3, 5, 7, 9, 11, 19, 21, 27, 33</p>
	T 3/3		<p>Complete worksheet</p>
	W 3/4	<b>SAT Testing Practice Quiz on Lessons 7.4 – 7.6</b>	Study for quiz
	Th 3/5	<b>Review of Lessons 7.4 – 7.6</b>	Study for quiz
	F 3/6	<b>Quiz on Lessons 7.4 – 7.6</b>	None

		<b>7-7 Writing Exponential Functions</b>	
	M 3/9	<i>Objectives:</i> <ul style="list-style-type: none"> <li>Write exponential functions by using a graph, a description, or two points.</li> <li>Create equations and solve problems involving exponential growth and decay.</li> </ul>	Page 452, #1, 3, 5, 7, 9  Page 453, #19, 21, 25
	T 3/10	<i>Essential Questions:</i> <ul style="list-style-type: none"> <li>What does a graph of exponential growth look like?</li> <li>How can you tell that an exponential equation represents growth? Decay?</li> </ul> <i>Standards:</i> A1.ACE.2, A1.FLQE.2, A1.FLQE.5, MP1	Complete worksheet
		<b>7-8 Transforming Exponential Expressions (Omit)</b>	
		<b>7-9 Geometric Sequences as Exponential Functions</b>	
	W 3/11	<i>Objectives:</i> <ul style="list-style-type: none"> <li>Identify and generate geometric sequences.</li> <li>Relate geometric sequences to exponential functions.</li> </ul> <i>Essential Questions:</i> <ul style="list-style-type: none"> <li>How can you tell if a sequence is arithmetic? Geometric?</li> <li>What is needed to find the nth term of a sequence?</li> </ul> <i>Standards:</i> A1.FLQE.1, A1.FLQE.2, MP7	Page 465, #1, 3, 5, 7, 9, 11, 17, 23, 29, 31
		<b>7-10 Recursive Formulas (Omit)</b>	
	Th 3/12 – F 3/13	<b>Chapter 7 Practice Test</b>	Study for test
	M 3/16	<b>Chapter 7 Review</b>	Study for test
	T 3/17	<b>CHAPTER 7 TEST</b>	None

*\*You are expected to attend Power Hour on a weekly basis.*

**You will need to go to Power Hour at least four (4) times during this chapter, or you may complete four (4) of the Suggested Practice assignments.**

If you choose to attend Power Hour,  
**your attendance must be tracked by getting the teacher's signature.**

If you choose to complete the Suggested Practice assignments,  
*all work must be shown to receive credit.*

**Staple all assignments to this assignment sheet and submit your work by the end of the chapter.**