

## Lesson Plan Template

<b>Grade: Algebra I</b>		<b>Subject: Math</b>	
<b>Materials: headphones and notes</b>		<b>Technology Needed: Personal computer</b>	
<b>Instructional Strategies:</b> <input type="checkbox"/> <b>Direct instruction</b> <input type="checkbox"/> Guided practice <input type="checkbox"/> Socratic Seminar <input type="checkbox"/> Learning Centers <input type="checkbox"/> Lecture <input type="checkbox"/> <b>Technology integration</b> <input type="checkbox"/> Other (list)		<b>Guided Practices and Concrete Application:</b> <input type="checkbox"/> Large group activity <input type="checkbox"/> <b>Independent activity</b> <input type="checkbox"/> Pairing/collaboration <input type="checkbox"/> Simulations/Scenarios <input type="checkbox"/> Other (list) Explain:	
<b>Standard(s)</b> 8.EE.7 Solve linear equations in one variable.		<b>Differentiation</b> <b>Below Proficiency:</b> Students who are below proficiency will be able to make the first step to find the solution. <b>Above Proficiency:</b> Students who are above proficiency will be able to solve problems without questions and will be able to state what they are doing. <b>Approaching/Emerging Proficiency:</b> Students would be able to solve the problems with relative ease but may not quite be able to state what they are doing. <b>Modalities/Learning Preferences:</b>	
<b>Objective(s)</b> By the end of the lesson I want my students to know how to solve multi-step equations with one variable. Multi step includes having problems with multiplication or division and addition or subtraction.  <b>Bloom's Taxonomy Cognitive Level:</b> Analyze Evaluate		<b>Classroom Management- (grouping(s), movement/transitions, etc.)</b> Students will watch the videos in order to learn the content. The room will have tables where a few students can sit in order to spread their materials out and work efficiently.	
<b>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)</b> Students will work on their assignments by themselves and ask for help by raising their hand when needed. They will work at their own pace through the lessons and do the required assessments when the website tells them			
<b>Minutes</b>	<b>Procedures</b>		
<b>30</b>	<b>Set-up/Prep:</b> Making of the video and getting other assignments ready.		
<b>2</b>	<b>Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)</b> I will have some frontloading and reminders for students for information that they need to know before the start of the lesson. This includes; like terms, distribution, inverse operations and reciprocals.		
<b>10</b>	<b>Explain: (concepts, procedures, vocabulary, etc.)</b> I will go through my notes in the video recording and show many examples for the students. (Notes on next page)		

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	Lesson Algebra I Sunday, October 6
	<p>EQU Today we are going to work with equations that require more than one step to solve for the variable. Today there are a few things you need to recall.</p> <p>Like terms-remember when we are trying to simplify equations we will need to combine terms that have the same coefficient attached to it. Terms like <math>2x</math> and <math>4y</math> would not be like terms, but terms like <math>3z</math> and <math>7z</math> can be combined because these terms have the same coefficient of <math>z</math>.</p> <p>2. Distribution- Remember what you must do if you see <math>2(x - 3)</math>. Because of the parenthesis we must multiply the 2 in front by both terms in the parenthesis. Doing this we get <math>2x - 6</math></p> <p>3. Inverse operations-Remember that inverse operations are operations that "undo" another. For example if I have <math>x + 2 = 0</math>, subtracting 2 would give us <math>x = -2</math>. Division and multiplication work in the same way.</p> <p>4. Reciprocal- the is fraction that when multiplied to another is 1. For example if you have <math>\frac{3}{2}</math> the reciprocal would be <math>\frac{2}{3}</math> because if we multiply the two fractions together we have a product of 1.</p> <p>1 <math>3z + 4z - 5 = 23</math> <math>z = 4</math></p> <p>2 <math>4x - 2x + 5 = 15</math> <math>x = 5</math></p> <p>3 <math>4w + 2(w + 5) = 70</math> <math>w = 10</math></p> <p>4 <math>7x - 3(x + 5) = 33</math> <math>x = 12</math></p> <p>5 <math>4 + 2(y - 3) = 89</math> <math>y = \frac{91}{2}</math></p> <p>6 <math>5 - 3(v + 7) = -1</math> <math>v = -5</math></p> <p>7 <math>\frac{2}{3}(x - 9) = 2</math> <math>x = 12</math></p> <p>8 <math>\frac{10}{k}(k + 16) = 120</math> <math>k = 125</math></p> <p>SQ <math>2j + 5 + \frac{4}{3}(3j - 12) = 7</math> <math>j = 3</math></p> <p style="text-align: center;">1</p>
∞	<p><b>Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)</b></p> <p>This will happen after the video. Students will do an assignment and then ask questions if they have any.</p>
2	<p><b>Review (wrap up and transition to next activity):</b></p> <p>I have a final problem that is meant to challenge the students understanding of the concepts. I will give them my answer to let them check if they got that question right.</p>
<p><b>Formative Assessment: (linked to objectives)</b></p> <p>Progress monitoring throughout lesson- clarifying questions, check-in strategies, etc.</p> <p><b>Consideration for Back-up Plan:</b> teach the lesson myself if the need arises.</p>	<p><b>Summative Assessment (linked back to objectives)</b></p> <p><b>End of lesson:</b></p> <p>Students will work on the given assignment after they watch the video to test their own knowledge and see what questions they have.</p> <p><b>If applicable- overall unit, chapter, concept, etc.:</b></p> <p>There will be a test over several sections that the students will have learned</p>
<p><b>Reflection (What went well? What did the students learn? How do you know? What changes would you make?):</b></p> <p>It took several takes to get the video correct. I would like to try to run the recording software off of two screens to make it easier to pause and start the recording. It was hard to try to get everything said how I wanted to on the first time so that showed me that I have to be ready to stumble over words during a lesson and just relax and keep going. Much of those problems came from not teaching the previous lessons and knowing how I would've taught that. This became interesting when I couldn't feed off of what my students would've been doing to know if it was making sense. It's hard to teach blind and not see how your students are taking the lesson that you have prepared. I was surprised with how well the recording went and how easy it was to edit the video. The use of one note on my computer worked as expected and smoothly for the most part. It was only occasionally sloppy and sometimes even crooked writing but with practice that would be fixed.</p>	

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\item[1]  $3z+4z-5=23$  \vs{0}  $z=4$  \vs{2}

\item[2]  $4x-2x+5=15$  \vs{0}  $x=5$  \vs{2}

\item[3]  $4w+2(w+5)=70$  \vs{0}  $w=10$  \vs{2}

\item[4]  $7x-3(x+5)=33$  \vs{0}  $x=12$  \vs{2}

\item[5]  $4+2(y-3)=89$  \vs{0}  $y=\frac{91}{2}$  \vs{2}

\item[6]  $5-3(v+7)=-1$  \vs{0}  $v=-5$  \vs{2}

\item[7]  $\frac{2}{3}(z-9)=2$  \vs{0}  $z=12$  \vs{2}

\item[8]  $\frac{10}{8}(k+16)=120$  \vs{0}  $k=80$  \vs{2}

\item[SQ]  $2j+5+\frac{4}{3}(3j-12)=7$  \vs{0}  $j=3$