

Careers in Action

Summer Teacher Internship/Lesson Plan Writing Project

This lesson has been endorsed by James J. McNamara, Principal, Maquilogistics, Inc.

Mayra Silva	Algebra II/Review of Symbolic Manipulation	June 4-21, 2007
Teacher's Name	Course/Subject	Date(s)/Time

Content	Objective(s)	Career Concentration(s)
	The student will categorize algebraic exercises into groups that share common characteristics with at least 80% accuracy based on a rubric.	<input type="checkbox"/> Agricultural Science <input type="checkbox"/> Art, Communications & Media <input type="checkbox"/> Business & Marketing <input type="checkbox"/> Health Science Technology <input type="checkbox"/> Human Dev., Management & Services <input checked="" type="checkbox"/> Industrial and Engineering <input type="checkbox"/> Personal and Protective Services
	TEKS Reference: A.4A TSW find specific function values, simplify polynomials, and solve equations	
	TEKS Reference: A.4B TSW use the commutative, associative, and distributive property to simplify expressions.	
	TEKS Reference: A.7B TSW solve linear equations and inequalities.	
	TEKS Reference: A.11A TSW simplify expressions with exponents.	
	TEKS Reference: 8.15A TSW use language to communicate mathematics.	
TAKS Reference: OBJECTIVES 2, 4, 5, & 10		

Process	Focus/Anticipatory Set	Bloom's Taxonomy in Lesson	Multiple Intelligences	SCANS							
	TTW: Ask students if they know of anyone who is a truck driver that works for a maquiladora. Show students a copy of a 7501 form from US. Customs and ask if they know what it is.	<input checked="" type="checkbox"/> Knowledge <input checked="" type="checkbox"/> Comprehension <input checked="" type="checkbox"/> Application	<input checked="" type="checkbox"/> Linguistic <input checked="" type="checkbox"/> Logical/Math <input type="checkbox"/> Musical <input type="checkbox"/> Spatial	Foundation		A	B	C	D	E	F
					1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Relevance/Connection to Workplace If you work for the maquiladora industry, you have to know all the different types of policies and regulations that the US government has in place for the transport of maquiladora products. Then you have to be able to effectively use your knowledge to better serve your clients. The classroom is a place where you can develop such categorical mental skills. The activity for today will help you practice categorizing algebraic exercises that you have already studied so that you can solve them with more accuracy. The goal is to help you distinguish what process to use given different exercises.	<input checked="" type="checkbox"/> Analysis <input type="checkbox"/> Synthesis <input type="checkbox"/> Evaluation	<input checked="" type="checkbox"/> Bodily-Kinesthetic <input type="checkbox"/> Intrapersonal <input checked="" type="checkbox"/> Interpersonal <input type="checkbox"/> Naturalist	Competencies	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
					3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
					4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
					5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
					5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Process	Instructional Methodology (Activities)	Instructional Material(s)
	<input type="checkbox"/> Lecture <input type="checkbox"/> Teacher Modeling <input type="checkbox"/> Media Presentation <input checked="" type="checkbox"/> Small Group <input checked="" type="checkbox"/> Class/Group Discussion <input type="checkbox"/> Question/Answer <input checked="" type="checkbox"/> Guided Practice <input type="checkbox"/> Independent Practice	Samples of US Customs 7501 Form, Algebraic Flash Cards, Justification Sheet US CUSTOMS WEBSITE http://www.cbp.gov/

Product	Detail(s) of Instructional Methodology (Activities)	Materials/Resources
	<ol style="list-style-type: none"> 1. Group students in sets of four and have them assign each other the roles of recorder, time keeper, and two presenters. Then hand out twenty-eight flash cards and "Justification Sheets". 2. Ask students to work together and sort cards into as many groups as they deem necessary depending on their own criteria. 3. Have students paste cards and explain the reasons for grouping them in such ways in the Justication Sheets and write down notes that help them activate their prior knowledge on how to solve those type of exercises. 4. Have two students from each group present at least two of their groupings. 5. Discuss how different or similar the class' results were. 6. Review how to solve the algebraic exercises and have individual students come to the board to demonstrate. 	Computer w/ Internet, EIKI projector, glue and scissors.
	Accommodations	Use of Technology
		Project US Customs website as students come into classroom. Spend a minute browsing through website as discussion of maquiladora industry is being held.
	Assessment	Bloom's Taxonomy in Assessment
<input type="checkbox"/> Teacher Evaluation <input type="checkbox"/> Peer/Self Evaluation <input type="checkbox"/> Employer Evaluation <input type="checkbox"/> Written/Oral Presentation <input type="checkbox"/> Test/Quiz <input checked="" type="checkbox"/> Others; <u>Rubric</u>	<input checked="" type="checkbox"/> Knowledge <input checked="" type="checkbox"/> Analysis <input checked="" type="checkbox"/> Comprehension <input type="checkbox"/> Synthesis <input checked="" type="checkbox"/> Application <input type="checkbox"/> Evaluation	
	<p>If students are having trouble sorting cards, lead a discussion of what could be some possible ways to sort them. Extended time can be given if needed. Refer to individual IEPs for special education students.</p>	<p>Remember: CATEGORIZE AND SOLVE!</p>
	<p>1. Reteach activity will be conducted the following day when students use their homework to identify common misconceptions and errors.</p> <p>2. For homework have each group member complete a set of ten flash cards so that they can be reviewed the next day.</p>	