Lesson Cover Page

Lesson Topic: Simplifying Rational Expressions

Length of Class Period: 70min

Course: Algebra II

Grade Level: 10

TERMINAL BEHAVIORAL OBJECTIVE

State the terminal objective (including content and behavior):

Given a rational expression students will be able to re-write the rational expression in simplified form.

CURRICULUM/STANDARDS

List all appropriate national, state or district curriculum or content standards that align to this lesson.
List the language objective for listening, speaking, reading and writing: Arizona ELP Standards [http://www.azed.gov/english-language-learners/elps/]

HS.A-APR.D.6.
HS.A-APR.B.3. I
HS.N-RN.A.1.
Listening and Speaking PE-8 through HI-8
(Mathematics Vocabulary. No standard for spoken vocabulary?)

HOMEWORK

If there is homework following this lesson, list it here:
Big Ideas Math : Algebra 2 (Big Ideas Learning LLC). Page 380. #3-10

RESOURCES/MATERIALS

List all resources that you will need to teach this lesson:
Slates, Markers, Feed the Snake Game (computer/internet/projector), Scratch Paper, Pencils, Calculators, “Find the Mistake” cards.
I. Feed the Snake - http://bit.ly/feedTheSnake002
II. Find the Mistake - http://bit.ly/whatIsTheMistake002
III. Factored Form Slate Problems - http://bit.ly/mixedFactoringWorksheet002
IV. Direct Instruction (with notes) - http://bit.ly/rationalExpression002

TIME	SUB-OBJECTIVE (include Bloom's level)	TEACHING STRATEGY	CHECK FOR UNDERSTANDING/ ACTIVE STUDENT PARTICIPATION
10min	**Given a fraction students will be able to rewrite the fraction in simplified form (application)**	**Two student will lead examples. Select students will lead the class in two basic examples.**	**"Feed the Snake" Game (Students answer questions in a rapid fire way)**
10min	**Given a polynomial students will be able to combine like terms (application)**	**Instructor will review the basic rules for combining like terms**	**"Find the mistake" Activity (questions cards). Students will need to find the mistake in incorrectly combined terms (and be prepared to give a verbal explanation)**
20min	**Given a polynomial students will be able to rewrite the polynomial in factored form (application)**	**Instructor will lead a discussion about the different factoring strategies. On the whiteboard the class will collaboratively create a "factoring guide" to help determine which strategy to use in different situations.**	**Students will solve several examples on their slates and present to the instructor.**
30min	**Given a rational expression students will be able to rewrite the expression in simplified form.**	**Direct Instruction. Instructor will lead the class through an example.** ***…the final 10 minutes of class is always spent starting the homework and answering individual questions.***	**Students will TPS in a discussion about all the previous pieces from the lesson play a role in simplifying rational expressions.** **Check for understanding also happens as students begin their homework in the final minutes (instructor walks around and observes)**