Unit Acquisition Lesson Planning Form

Teacher(s):

Date:

Unit Title: Expressions Part 1

Essential Question:
1. Some people view Algebra as a language. What are the verbs, nouns, and vocabulary that might be most important in the language of Algebra and how are they used?
2. What are the rules of mathematical language and why do we have to follow them? [i.e. 3+2x4 has a different meaning than (3+2)x4]
3. Why and how might mathematical phrases be used to describe real-world situations?

Common Core Standard(s) addressed: 8.NS.2 – Use rational approximation of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram and estimate the value of expressions (e.g. π^2)., N.Q.3 – Choose a level of accuracy appropriate to limitations on measurement when reporting quantities

N.RN.3 – Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational. Example, does adding 0.5 to π change the non-repetition and non-terminating aspect of π?

A.SSE.1 – Interpret expressions that represent a quantity in terms of its context.

a. Interpret parts of an expression, such as terms, factors, and coefficients

b. Interpret complicated expressions by viewing one or more of their parts as a single entity. For example, interpret P(1+r)n as the product of P and a factor not depending on P

A.SSE.3 – Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.

Activating Strategies: (Pearson Text book Lesson videos)
Math Forward/TI Navigator:
TI Navigator Activity, Learning checks, Activity Ctr. 'Translating Verbal Expressions

> How are you going to hook the students into the lesson by watching the video?

Vocabulary Preview/Instruction:

Algebraic expression	Equivalent expressions	Coefficient
Greatest Common Factor		
Numerical expression	Integer	Substitution
Sum		
Verbal expression	Irrational number	Distribute
Difference		
Base	Real number	Factor
Product		
Exponent	Variable	Simplify
Quotient		
Counterexample	Constant	Evaluate

Teaching Strategies (Instruction and Modeling)

PearsonTraining.com

Instruction (*Provide a ==narrative== or ==list task to be performed by teacher and students==*)**:**

(Assessment prompts-questions or tasks are embedded in the lesson to check for understanding. Note- Assessment prompts with AP#1, AP#2, AP#3 etc.)

> Instruction: What content are you teaching? What best practices are you using?

> Assessment Prompts: How will you "chunk" your lesson and check for understanding?

Concept 1:   Substitution, (Incorporate formulaic expressions from Alg. 1: quadratic formula, distance formula, midpoint formula, slope, Pythagorean theorem, etc.
Concept 2: Translating Verbal Expressions,
Concept 3: Evaluating Expressions (Order of Operations)

*Graphic Organizer(s) Used: Frayer Diagram, Order of Operations flip chart

*Student Technology Use: TI 83/84, Pearson On-Line text

Independent Practice (Differentiation):

> How will the lesson vary according to students' ability to understand? Does the complexity change? Can they "peer tutor?"

Summarizing Strategies:

Parking lot, Ticket out of the door, notebook notes summarized

> Give an example of the ticket out the door. What part of the notes do you want summarized?