

General Education Math Lesson Plan

Simplifying Expressions

Source: Bennett, J.M., Burger, E. B., Chard, D. J., Hall, E., Kennedy, P. A...Waits, B. W. (2011). *Mathematics*. Austin, TX: Holt McDougal

Standard: H.NO.2c1 Simplify expressions that include exponents
H.NO.2c2 Rewrite expressions include rational exponents

Materials:

Activities:

- Focus and Review: Talk about the phrase “compare apples to oranges” and what that means. Explain how similar terms in expressions are combined
 - Lecture: Teacher works through a variety of problems simplifying expressions with and without exponents. During this lecture, the teacher highlights common mistakes made. For example, in the expression $4x + 3 + x$, commonly students will not combine all three terms correctly because they forget that if no coefficient is given the coefficient is 1. Therefore x is $1x$.
 - Guided Practice: Students simplify a variety of expressions from their textbook.
 - Independent Practice: Students complete activity sheet
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Activity: Create a universally designed version of the above lesson

UDL Planning	My ideas
Representation- adaptations in materials (e.g., adapt for sensory impairments)	Include manipulatives with each expressions representing terms (squares for x terms, circles for y terms, etc) to help students pick terms that should be simplified
Expression- how will student show learning (e.g., use of assistive technology; alternative project)	Provide student a term and an expressions and ask them to identify the terms that could be combined
Engagement- how will student participate in the activity	Student can work in a pair during independent practice; include personally relevant word problems or stories to put the expression in context.