

General Education Math Lesson Plan - Measurement: Finding the area of a triangle

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: 5.NO.2b3 Multiply or divide fractions
5.NO.2c2 Solve word problem involving the addition, subtraction, multiplication, or division of fractions

Learning Outcome: Students will multiply fractions and mixed numbers.

Materials: word problems, pencil, writing utensil

Activities:

- Focus and Review: Ask students if they have ever used a recipe to cook. Did the recipe include fractions? What if you needed to make a double batch or half a batch?
- Lecture: Teacher works through a variety of problems multiplying fractions with other fractions and with whole numbers.
- Guided Practice: Students work in pairs to complete 5 word problems from their math textbooks
- Independent Practice: Students work 5 word problems using real-world application. Students are expected to pull essential facts from the story to create the equation and solve for the product.

Activity: Create a universally designed version of the above lesson

| UDL Planning | My ideas |
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| Representation - adaptations in materials (e.g., adapt for sensory impairments) | Use a real recipe that students could make; visual models of fractions; use a graphing calculator or any other calculator that would allow students to enter fractions and mixed numbers |
| Expression - how will student show learning (e.g., use of assistive technology; alternative project) | Use a calculator or manipulative; use actual measuring cups with students pouring two times the measuring cup into a larger measuring cup, and reading the final measurement |
| Engagement - how will student participate in the activity | Student can work in a pair during independent practice; alter word problems to make personally relevant (e.g., add student's name, change the context to be something familiar) |