## Developing Pre-K-12 Math Educators as Teachers of Writing Across the Curriculum

Patricia Emmons Savannah, Georgia WAC Conference June 8, 2012

# Explain in writing three ways to solve the problem



# Why write in math?

- Students write to keep ongoing records about what they're doing and learning
- Students write in order to solve math problems
- Students write to explain mathematical ideas
- Students write to describe learning processes

# Types of Writing

- Freewriting open ended
- Journal writing reflective
- Learning logs two column notes
- Blogs or personal narratives what they learned, questions, etc.
- Portfolios showcase deep understanding
- Real life connections
- Summaries skills or processes
- Storybooks entertaining others

## Open Response Assessment

Charlie used cards to make the number shown below.



- 1. Round 273 to the nearest hundred.
- Charlie used the same cards to make a new number. The new number is different from 273.
  The new number rounds to the same hundred as 273.
- 3. What is the new number Charlie made? How do you know? Are there any other options? Explain.

# Literacy Project

- Connect selected mathematics topics to literacy.
- MA Curricululm Frameworks
- Students will write a book that could be used to introduce/reinforce/review various math concepts for a specific grade level
- Focus on 5 different content areas: number sense, algebraic thinking, geometry, probability statistics & probability, measurement, and/or problem solving.

#### **Connection to Literature Rubric**

### Examples

"Reflection and communication are intertwined processes in mathematics learning... Writing in mathematics can help students consolidate their thinking because it requires them to reflect on their work and clarify their thoughts about their ideas" NCTM 2000