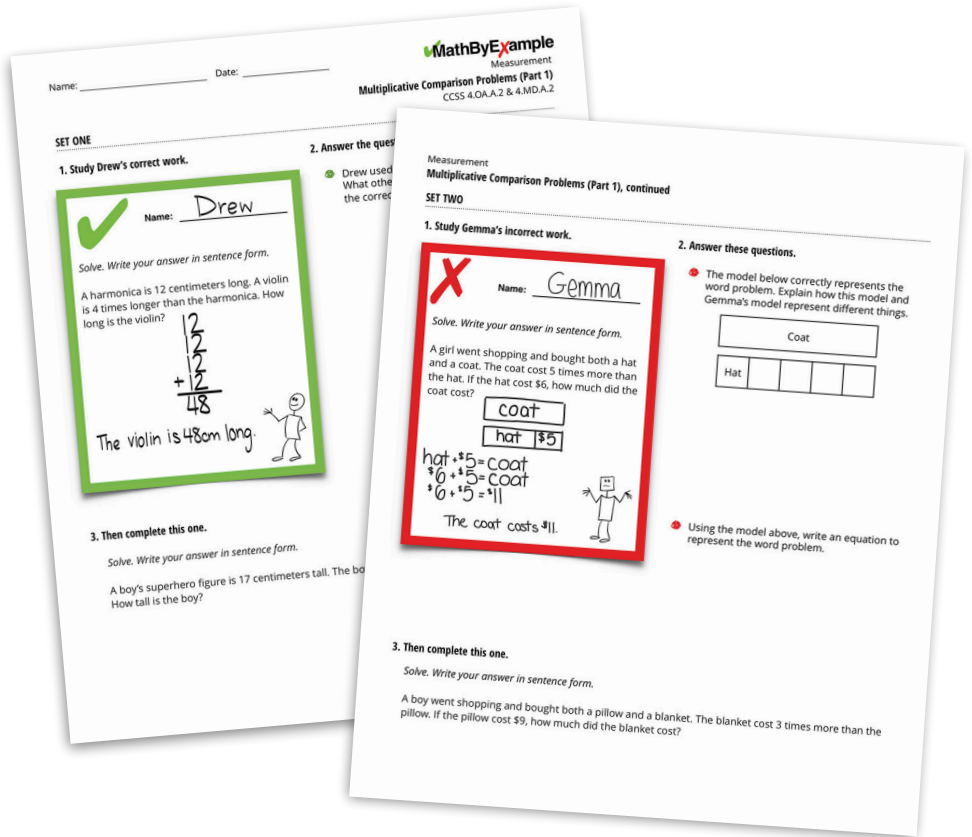




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- Works flexibly with a wide range of curricula
- Supports 4th and 5th Grade Content and Practice Standards
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	Typical textbook	Math ByExample
Solving problems	✓	✓
Analyzing Math Problems*	✗	✓
Critiquing Math Solutions*	✗	✓
Articulating Math Arguments*	✗	✓

*critical behaviors highlighted in the CCSS-M Practice Standards



Example-based Math Problem Sets for Grades 4 and 5

These are not ordinary math assignments.

Typical math assignments give students plenty of practice solving problems but little or no practice with mathematical argumentation.

MathByExample assignments give students practice solving problems, as well as practice modeling, analyzing, critiquing, and articulating mathematical arguments.

Each **MathByExample** assignment targets **common math mistakes** using worked examples that are marked as either correct or incorrect. Students then work a similar problem independently or with classmates.

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Development of MathByExample was led by Julie Booth (Temple University) through a SERP collaboration with several school districts.

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The general culture of the math classroom in the United States is that errors are this taboo thing that are meant to be gotten rid of as soon as they're made. We're changing that and making the error the focal point of the instruction. We're giving the students a chance to engage with errors without the stigma of it having been their own error. The goal is for students to realize that errors can be a productive part of the learning process, and that by making errors in the classroom, it doesn't mean a student is "not a math person," but that making mistakes is all part of the process and leads us to become better math learners.

Dr. Julie Booth, Temple University