

## NEMATYC Hosts Its First Fall Dinner Meeting

On Friday September 29 NEMATYC hosted its first fall dinner meeting at Quinsigamond Community College. With 25 attendees the meeting indicated member support for this kind of event. The original speaker was forced to cancel due to illness, and Professor Richard Bisk of Worcester State College was kind enough to present on short notice. Richard's topic was *The Mathematics Knowledge Required of Elementary School Educators*. All present enjoyed a lively, fact-filled and thought provoking presentation. Among other things Richard made the case that teachers of basic number facts, operations, and algorithms (aka arithmetic) require a deep knowledge of arithmetic to properly teach the subject, and that this must transcend simple knowledge of the algorithms we call arithmetic. He made the case that a solid knowledge of arithmetic – including an understanding of its algorithms – forms the necessary basis for success in the more abstract parts of mathematics. These teachers should also have a good grasp of geometry concepts, and be able to relate them to arithmetic. As an example, using the basic axiom that areas add, we can compare the algorithm for  $28 \times 47$ , with the geometric figure shown.

Richard also stated that his research has shown a strong positive correlation between MCAS scores of incoming students at his institution and their scores on the Accuplacer exam, which is now administered to all incoming students at Massachusetts' community and state colleges. He also noted that at Worcester State College they improved the "pass" rate on the Accuplacer entrance math exam from 46% to 65% simply by requiring students to take an in-house pre-test first. WSC further improved this rate to 76% (wow!) by requiring that students either pass the pre-test on one of two attempts or else come in for a two hour review before taking the actual Accuplacer. Richard noted that further research is required to ascertain that this has not reduced the effectiveness of the test as an initial placement vehicle.

President Andrew Perry thanked Maureen Woolhouse and Elaine Previte for their efforts in making this great meeting happen.

$$\begin{array}{r}
 47 \\
 \times 28 \\
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 376 \\
 940 \\
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 1316
 \end{array}$$

	40	7
20	800	140
8	320	56



Professor Richard Bisk of Worcester State College addresses NEMATYC members at Quinsigamond Community College.