Survey: Mathematical Education of Elementary Teachers Project

http://meet.educ.msu.edu/

Student Assessment, Parts 1 & 3

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513 Erickson Hall, East Lansing, MI 48824 517-353-8565
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<tbody>
<tr>
<td>a.</td>
<td>I’m good at mathematics.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>b.</td>
<td>In mathematics you can be creative.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>c.</td>
<td>Mathematics is a collection of rules and procedures, which prescribe how to solve a task.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>d.</td>
<td>Learning mathematics is mostly memorizing facts.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>e.</td>
<td>Mathematical thought is characterized by abstraction and logic.</td>
<td>1</td>
<td>2</td>
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<td>f.</td>
<td>Usually there is more than one way to solve mathematical tasks and problems.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>g.</td>
<td>Hallmarks of mathematics are clarity, precision and unambiguousness.</td>
<td>1</td>
<td>2</td>
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<td>h.</td>
<td>Mathematics is useful for solving everyday problems.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>i.</td>
<td>Math problems can be done correctly in only one way.</td>
<td>1</td>
<td>2</td>
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<td>j.</td>
<td>Mathematics involves remembering and application of definitions, formulas, mathematical facts and procedures.</td>
<td>1</td>
<td>2</td>
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<td>k.</td>
<td>Almost all people use mathematics in their jobs.</td>
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<td>2</td>
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<td>l.</td>
<td>In mathematics many things can be discovered and tried out by oneself.</td>
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<td>m.</td>
<td>If one engages in mathematical tasks, one can discover new things (connections, rules, concepts).</td>
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<td>n.</td>
<td>Mathematics entails a fundamental benefit for society.</td>
<td>1</td>
<td>2</td>
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<td>o.</td>
<td>Mathematics is useful for every profession.</td>
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<td>2</td>
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<td>p.</td>
<td>Mathematics is characterized by rigor, namely rigor of definition and rigor of formal mathematical argumentation.</td>
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<td>2</td>
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<td>q.</td>
<td>Everything important about mathematics is already known by mathematicians.</td>
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<td>2</td>
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<td>r.</td>
<td>To do mathematics demands much practice, correct application of routines, and problem solving strategies.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>s.</td>
<td>I like mathematics.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>t.</td>
<td>There is only one correct way to solve a mathematics problem.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>u.</td>
<td>To solve math problems you have to be taught the right procedure.</td>
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<td>2</td>
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<td>4</td>
</tr>
</tbody>
</table>
Part 3: Personal Information

1. What is your year of birth? 1982 83 84 85 86 87 88 89 other _______

2. Are you male or female?
   a. Male
   b. Female

3. a. Are you of Hispanic or Latino origin?
   a. Yes
   b. No
   
   b. What is your race?
   Select one or more races to indicate what you consider yourself to be.
   a. White
   b. Black or African-American
   c. Asian
   d. Native Hawaiian or other Pacific Islander
   e. American Indian or Alaska Native

4. How far in school did your mother go?
   Select one.
   a. Did not finish high school
   b. Graduated high school
   c. Some education after high school
   d. Graduated college with a Bachelor’s degree
   e. Advanced college degree
   f. I don’t know

5. What is your current level in college?
   Select one.
   a. Freshman
   b. Sophomore
   c. Junior
   d. Senior
   e. Other (Please specify: _________________________________ )

6. From the beginning of college until the end of this semester, how many courses will you have taken in mathematics, including statistics and computer science?
   Select one.
   a. None
   b. 1
   c. 2
   d. 3
   e. 4 or more

7. Are these courses measured in semesters, quarters, or years? Select one.
   a. Semesters
   b. Quarters
   c. Years
8. Have you taken a calculus course in college?
   a. Yes
   b. No

9. What is your major field of study?
   Select one.
   a. Education
   b. Mathematics
   c. Other (Please specify: _____________________________)

10. Do you have a second major field of study?
    a. Yes
    b. No
    If you don’t have a second major field of study, go to question 12 below.

11. What is your second major field of study?
    Select one.
    a. Education
    b. Mathematics
    c. Other (Please specify: _________________)

12. Do you have a minor field of study?
    a. Yes
    b. No
    If you don’t have a minor field of study, go to question 14 below.

13. What is your minor field of study?
    Select one.
    a. Education
    b. Mathematics
    c. Other (Please specify: _________________)
14. What was the size of the high school you graduated from?
   Select one.
   a. 0-500
   b. 501-1000
   c. 1001-1500
   d. 1501-2000
   e. >2000

15. What is the zip code of your permanent home address? __________

16. What was your GPA in high school? ______

17. Did you take the ACT college entrance exam?
   If you did not take the ACT, please go to question 19.
   a. Yes
   b. No

18. If yes, what was your highest ACT score on the mathematics portion of the test?
   ______ Highest score on the ACT mathematics

19. Did you take the SAT college entrance exam?
   If you did not take the SAT, please go to question 21.
   a. Yes
   b. No

20. If yes, what was your highest SAT score on the mathematics portion of the test?
   ______ Highest score on the SAT mathematics
21. Did you take any of the following courses from eighth grade through graduation from high school? Check “Yes” or “No” for each course. If yes, in what year(s) did you take this course? Check one or more grades for each course that you took. INCLUDE courses taken in summer school, but DO NOT INCLUDE subjects that were only taught as part of a longer course (such as trigonometry taught in drafting course or computer programming taught in Algebra II).

<table>
<thead>
<tr>
<th>Did you ever take this course in high school?</th>
<th>If yes, in what year(s) did you take this course?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I took this course in or before Grade 8</td>
</tr>
<tr>
<td>a. Basic or general mathematics course</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Tech-prep mathematics, business mathematics, consumer mathematics, or other applied mathematics course</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Introduction to algebra or pre-algebra course</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Algebra I course</td>
<td>Yes</td>
</tr>
<tr>
<td>e. Geometry course</td>
<td>Yes</td>
</tr>
<tr>
<td>f. Algebra II course, with or without Trigonometry</td>
<td>Yes</td>
</tr>
<tr>
<td>g. Trigonometry (as a separate course)</td>
<td>Yes</td>
</tr>
<tr>
<td>h. Pre-calculus course (also called Algebra III or elementary functions and analysis)</td>
<td>Yes</td>
</tr>
<tr>
<td>i. Unified, integrated, or sequential mathematics course</td>
<td>Yes</td>
</tr>
<tr>
<td>j. Probability or statistics course</td>
<td>Yes</td>
</tr>
<tr>
<td>k. Calculus course</td>
<td>Yes</td>
</tr>
<tr>
<td>l. Discrete or finite mathematics course</td>
<td>Yes</td>
</tr>
<tr>
<td>m. Other mathematics course</td>
<td>Yes</td>
</tr>
<tr>
<td>n. Computer programming course (such as C++, Pascal, Visual Basics, etc.)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Thank you for completing this survey! Please put it in the envelope along with the Test Booklet and return it to your instructor.