Mathematics Diagnostic Testing Project (MDTP)

How is MDTP useful for student learning and instruction?

The MDTP tests are designed to measure student readiness for a broad range of mathematics courses, from Pre-algebra to Calculus. More importantly, the tests were developed to provide students and teachers with diagnostic information about student preparedness. This information can help students identify specific areas where additional study or review is needed. It can help teachers identify topics and skills that need more attention in courses. The MDTP tests are diagnostic, not comprehensive; they should not be used as final exams.

Visit http://mdtp.ucsd.edu/Videos.shtml to learn about how teachers use the MDTP to:

- Shift pedagogy and focus
- Share students strengths and weaknesses
- Place students for success in math

Test Results

Schools should help students interpret their individual test results in ways that best meet the students' needs. In particular, each K-12 student who takes an MDTP test should be provided with a copy of the student letter that indicates the student's score and identifies those topics in which more work is needed. Students whose test results indicate readiness for a mathematics course should be encouraged to pursue their mathematics education. They should also be cautioned that success in a course requires good study habits and persistence. Students whose test results indicate inadequate preparation for a particular course should be advised to develop readiness for that course either by individual study or enrollment in a course that will prepare them for it. They should not be counseled out of mathematics.

Since MDTP tests are designed to measure readiness for further mathematics study, no scaling of scores is provided. Raw scores are used for reporting to students and, when used as part of a placement procedure, for providing one reliable indication of the extent to which a student's current mathematical proficiency matches the skills and knowledge needed for success in a course. Other indicators should also be used. Statistical analysis of test performance and subsequent course performance is a prerequisite to valid uses of test results for placement purposes. This analysis must be undertaken at each school and for each course to determine cut scores and counseling ranges. Moreover, the analysis should continue as long as the tests are used, as they should for any other matriculation assessment instrument.

The UC Davis site serves the following counties: Alpine, Amador, Calaveras, El Dorado, Placer, Sacramento, San Joaquin, Solano, Sutter and Yolo. If you do not see your school's county on this list, please visit http://mdtp.ucsd.edu/counties.shtml

FREQUENTLY ASKED QUESTIONS

Which MDTP test should I administer?

This is a list of suitable, existing MDTP tests that could be used to measure readiness for students moving up to the following Common Core aligned classes in the fall:

STUDENTS ENTERING	TEST TO ADMINISTER
Math 6 or Math 7	7R40A15 or PR40A04
Math 8	8R40A15 or AR45A10
Algebra 1/ Math 1	HS45A15 or AR45A10
Geometry	GR45A06
Math II	IS45A00
Algebra II	SR45A06
Math III	IT45A00 or SR45A06
Precalculus	MR45A08
AP Calculus	CR45A12
AP Statistics	MR45A08 and WRI
Discrete Math	MR45A08

When should I administer the test(s)?

Teachers often administer tests near the beginning of the course to help identify curriculum areas that need review, during courses to measure growth from the beginning of the year, and/ or near the end of the course to help students prepare for the next mathematics course.

What test subjects do you offer?

Pre-algebra Readiness

- Algebra Readiness
- CAHSEE Prep Diagnostic Readiness
- Geometry Readiness
- Second Year Algebra Readiness
- Mathematical Analysis Readiness
- Calculus Readiness

For a detailed list of each test visit: http://mdtp.ucsd.edu/Tests.shtml

How long does it take to receive the test results?

Our office strives to have test results available within 48 hours. Please do keep in mind that mail can take several days to get to our office. We can have test results mailed to you, or you are welcome to pick them up in Dutton Hall.

Is the MDTP test helpful with the changes to the Common Core State Standards in Mathematics?

Yes! MDTP began developing readiness tests aligned to the new California Common Core Standards for Mathematics in 2013. With the creation of the Grade 8 Mathematics course and the change in expectations for what is taught in Grade 7 Mathematics and Algebra I, the MDTP Workgroup began assembling a Grade 7 Math Readiness Test (7R40D15), Grade 8 Math Readiness Test (8R40D15), and High School Readiness Test (HS45A15). The second year of field testing began in fall 2014, and the goal this fall MDTP released three new Common Core aligned tests: 7th Grade Math Readiness, 8th Grade Math Readiness and High School Math Readiness (appropriate for Algebra 1 or Integrated Math 1 classes). In 2014, the Workgroup began work on two new tests for schools implementing the integrated pathway. These tests will measure readiness for high school Math II and Math II courses. If you would like to participate in the 2015-2016 field testing and your school has already moved to align its math courses with the new CCSS, please contact mdtp@ucdavis.edu

Scoring and Feedback

Students and teachers view a category (Focus Standard) and whether they are strong, proficient, or week in that standard; they also receive their raw score in each standard. Additionally, staff is given a percentage that is loosely interpreted as 50% needs re-teaching, 50-69% need review, and 70% demonstrate readiness for the next course.