Information for Students and Parents Regarding College of DuPage (COD) Math Courses and the COMPASS Math Placement Test:

What are COD math classes like?

- There are two kinds.
 - **College-level courses** count for college credit and fulfill college degree requirements. These all have course numbers that are 1000 or higher.
 - **Developmental courses** repeat what people should have learned in high school and even earlier. The easiest Developmental courses begin with topics like fraction and decimal arithmetic, and go up through advanced algebra topics like radicals, functions, and algebraic fractions. Their course numbers begin with a 0, like 0481 (Foundations for College Mathematics I) and 0482 (Foundations for College Mathematics II).
 - COD courses that cover the same content as York's Advanced Algebra/Trig or Algebra 2 are <u>Developmental</u> courses. If you do not master this material at York, you will have to take a Developmental class at COD for NO CREDIT.
 - You must pass a challenging placement test to show you have strong skills in arithmetic, basic algebra, advanced algebra, and geometry. This test is called the COMPASS Test and is produced by the same company that writes the ACT.
- No matter which course you take at COD, you need to earn a grade of "C" or better in that course in order to go on and take any course for which it is a prerequisite.

Can you tell me more about Developmental math courses?

- These courses cover material from elementary school, middle school, and high school.
- There is NO CALCULATOR ALLOWED in these courses.
- You must pay tuition, but the course does not give college credit.
 - Developmental courses do not count towards an Associate's Degree.
 - They do not count towards eligibility, athletics, or insurance.
 - They do not transfer to any other institution.
 - They do not count in the student's GPA.
- If the COMPASS placement shows that you lack skills from middle school or high school, you CANNOT GO ON TO COLLEGE-LEVEL MATH COURSES UNTIL YOU PASS (with a grade of "C" or better) THE DEVELOPMENTAL MATH COURSES THAT COVER THOSE SKILLS.
- There are also Developmental courses in English. Math and English skills are needed in all fields.

What should I know about the COMPASS Math Placement Test?

- The COMPASS Test is produced by the same company that writes the ACT.
- There is a four-function calculator on the computer that you are allowed to use. (This is a new policy.)
- Everyone taking the test starts with Geometry questions. You need a score of 30 or better on the Geometry in order to place out of a Geometry class at COD. If you do not earn at least a 30, you will need to take Elementary Plane Geometry (Math 0470), which is a Developmental course that covers the same content as York's Geometry or Geometry/CAD.
- You may change your answer to a question only while you are still on that question. Once you move past a question, you may not return to that question. You may not review your answers.
- The placement test is computer-adaptive. This means that if you perform well on an item of intermediate difficulty, you will be presented with a more difficult question. Or, if you performed poorly, you will be presented with a simpler question. In terms of mathematics, if you answer the algebra questions correctly, you move on to college algebra questions. If you answer the algebra questions incorrectly, you move to pre-algebra questions. If you get enough pre-algebra questions correct, it is possible to move back up to the algebra questions.

Are there any tips for taking the COMPASS Math Placement Test?

- There are sample problems that you can view at these websites:
 - www.act.org/compass/sample www.tesprepreview.com/compass_practice.htm www.compasstestquestions.com
- Every problem on the test is important. Take your time and answer each question carefully. The test is not timed.
- Write down the problems from the computer screen onto scratch paper and work them out. Do not try to figure the problems out in your head.

Can I retake the Math Placement Test?

- Once you have taken the test you can re-take it ONCE, but that must happen quickly (within 28 days). After that, you must wait two years before taking the test again.
- Your score is used to place you in your first math, provided you take it within two years. If you wait longer than that to sign up for your first math course, you must re-take the Placement Test.

What if I feel unprepared for the COMPASS Math Placement Test Score?

- COD offers a two-week workshop course to help people prepare for the COMPASS. The course is called Math 0485. Math 0485 is designed for students who have previously done well in math, have completed at least two years of high school algebra, and are in need of a robust refresher on previously learned content.
- The course uses specialized math education software to identify what you know and what you need to learn or re-learn. All students will be required to retake the standard COD placement exam before and immediately following the workshop.
- For Math 0485 summer dates, check COD's website or contact the Division Office at IC 3028 or 630-942-2010.

Are ACT scores used for placement?

• If you score 23 or better on the math section of the ACT, you do not have to take the COMPASS. Instead, your ACT math score allows you to register for beginning college-level courses.

In the placement process, how much weight is given to student's high school math courses?

- In fact, students' high school math courses are to be given no weight, as far as placement is concerned.
- Instead, you demonstrate that you mastered high school material in one of three ways:
 - o passing the COMPASS Test, or
 - o scoring 23 or higher on the ACT math section, or
 - failing the COMPASS and being placed in the appropriate Developmental math course, then passing that course and any following prerequisite courses with a C or better.

What is the COD's philosophy on the role of calculators?

- COD does not allow the use of any calculator in Developmental arithmetic and algebra courses (courses that begin with a 0) because these courses exist to remediate skills and understanding.
- Graphing calculators are required in some courses: College Algebra with Applications (M1428), and Finite Mathematics (M1533).
- For all other college-level courses, graphing calculators may be used at the discretion of the individual instructor.
- Technology is widely used in Quantitative Literacy (M1220); instructors use a combination of graphing calculators, *MS Excel*, and *MathCad*.
- In Statistics (M1635), the majority of the instructors use *Minitab* throughout the course. Another option is *MS Excel*.

What should students be able to do in order to be ready for collegiate math classes?

- Students need to be able to think critically in order to be successful at problem solving.
- Students should not be calculator-dependent.
- Students should have strong algebra skills.
- Students should have a strong command of basic arithmetic facts and operations. A working knowledge of the multiplication tables enables students to factor expressions, find lowest common denominators and greatest common factors more easily and successfully. Students should know basic powers of whole numbers to be more comfortable working with rational exponents and radicals. They need to be proficient in operations with fractions particularly addition and subtraction which is critical for success in adding, subtracting, multiplying, and dividing rational expressions in algebra.

What advice concerning grades in high school mathematics courses should students know?

- Grades are important, and students should strive to earn the best grades they can. What is even more important than earning a good grade?
 - Understanding the material.
 - Remembering the material.
 - Developing good study habits.

What college-level expectations should high school students know about?

- Most college math classes:
 - Do not offer extra credit opportunities.
 - Do not give much, if any, credit for homework.
 - Do not give credit for good attendance.
 - Have semester grade depend mostly on exams.
 - Have long exams that easily take the full class period.
 - Rarely have multiple-choice tests.
 - Require a C or better in a COD prerequisite math course before moving on to the next math course in the sequence.

What about students with special needs?

- COD uses what they call a "blue card system".
- Students must get registered at the Office of Special Needs.
- Common supports include: extra time, translation, alternate location.
- Calculator use is okay, but only if it is mentioned in the student's assessment. Even so, a calculator is not allowed in an arithmetic class.
- Students need to declare beforehand if extra time on tests is needed, and not after the fact.
- Contact the student's high school case manager for more specific information.

Where can I go for additional information?

- Natural and Applied Sciences Division Office: 630-942-2010
- Math Assistance Area: 630-942-3339
- Center for Independent Learning: 630-942-3354
- Website for the Mathematics Department at COD: <u>http://www.cod.edu/math/assistance.htm</u>