

Math Toolkit

Guide to finding help and materials that will assist math students be more successful.

1. The math department schedules extensive outside of class tutoring. Each MYP/DP math subject's teacher is offering at least one day per week of additional help. Additionally, several math teachers also offer before school additional help hours.
2. Each MYP/DP math teacher will assign daily homework. Math is not a spectator sport, we expect students to try and work every problem. That means for problems you can't answer right now, a student should be able to:
 - a. Sketch a picture of the situation, and/or
 - b. Write down given information, and/or
 - c. Write down related formula(s), and/or
 - d. Find and copy a similar problem in the same section of the material, including a problem worked in class.

Homework is due at the beginning of class. Any work not turned in at the beginning of class, which will mean as soon as the teacher asks for it, will be marked late.

We are trying to encourage outside of school practice, review and thought.

3. Skills can be reviewed using khanacademy.org videos. The videos are not arranged using MYP/IB course names or chapter headings. The videos are arranged by topic so a student will need to choose the general subject and then look for specific videos that help with their question. There are videos on most topics in all MYP/DP math classes, including calculus, statistics, series and sequences, trig, matrices, imaginary numbers, proof, solving algebraic equations, geometry, and factoring.
 - a. The MYP Algebra 2 textbook is available online. There are additional video lessons on this site as well as additional examples, problems, and self-check quizzes.
 - b. Be cautious of Google searching for help. The MYP and DP math curriculums and assessments change. Make sure if you use Google searches for help, you are looking at 2012-2013 content, especially for MYP and DP assessments.

The video lessons focus on developing skills and do not yet do a good job on helping with open ended questions. Refer to #2 above.

4. Each MYP/DP math teacher keeps powerpoint notes, worksheets, and schedules online, we use both schoolspace and Google calendar. We encourage parents to access the Google calendar and routinely ask their student about current assignments and lessons.
5. Math is an algorithmic subject. Each math problem should be thought of a series of logical steps. When we ask to see work, we are checking that the algorithm is understood and complete. We understand that some students can keep several steps in their head or utilize a calculator to manipulate several steps of a problem, but, answers with no work are meaningless to check if the student understands the process. Further, there are many ways to apply technology or utilize assistance to get an answer. We need to check work to ensure that the student learns the algorithm and doesn't rely upon re-finding the technology or assistance to solve similar problems. Finally, we understand that while learning is a process, and technology and assistance are helpful, it is our shared job to ensure learning and answers do not end at knowing where to find a solution.

MYP Geometry
MYP Algebra 2
MYP Extended Math
DP Mathematics SL
DP Math Studies SL

Many students also take
AP Statistics
AP Calculus