



Dear Concordia Parents:

The Concordia math and science departments have earned a reputation for being committed to a level of rigor in our courses that requires students to truly own their computational skills and not depend upon a calculator or other technology to calculate or solve problems for them. However, many mathematical and scientific concepts can be more deeply understood through the kind of exploration that graphing utilities like calculators provide. For this reason, the math and science departments, along with the high school administration, have decided that it would be beneficial for every Concordia student in grades 9 – 12 to own a TI-Nspire CX CAS handheld graphing calculator.

This decision comes after months of fact-finding, exploration, and discussion within and among the departments and the administration. We believe that the benefits of expecting all Concordia high school students to have their own TI Nspire CX CAS calculator are many, and include:

- Expanded opportunities at all levels to explore concepts and deepen understanding, which leads to a more solid foundation upon which to build in future courses.
- The advantage of buying a single calculator to serve all of the student's needs throughout high school (and even into college).
 - The TI Nspire CX CAS will be the calculator of choice in both math and science courses. Teachers will be able to demonstrate concepts using a single calculator, and students will gain familiarity with the calculator and its many functions.
 - The TI Nspire CX CAS may be used on the PSAT, SAT, and all AP math and science exams (except for AP Biology, where only a four-function calculator is allowed). The ACT does not allow the CAS model of this calculator, but does allow the non-CAS version.
- Software updates are provided by Texas Instruments and can be downloaded from their website. There is no need to buy a new calculator to acquire the most up-to-date technology.

Beginning in August of 2014, every high school student will be required to own to their *own* TI Nspire for use in their math and science classes. We are implementing this through a 2-year phase-in process using the following guidelines:

- **Recommended: TI Nspire CX CAS** which can be bought in the United States for around \$150. The TI Nspire CX CAS can also be obtained through Texas Instruments here in Shanghai, but the cost is generally about 30% higher. Therefore, if you have an opportunity to shop around outside of China, we would suggest that you do so.
- **Acceptable:** TI Nspire CX (non-CAS) if the student would like to use their calculator on the ACT. Otherwise, another calculator can be used for the ACT and the CAS version can be used on all other external assessments.
- **Acceptable:** If the student is a *junior or senior (grade 11 or 12)* in the fall of 2014, and does not wish to make the investment in the TI Nspire for their remaining two years at Concordia, we will allow the student to download the software program for the computer or the application for the iPad. Each costs around \$30 for a one-year license. The student may need to borrow a handheld TI Nspire from the teacher for assessments, but the functionality is the same and should not cause an issue. Note: THIS IS NOT AN ACCEPTABLE OPTION FOR 9TH AND 10TH GRADERS.
- Students and their families are responsible for acquiring the TI Nspire calculator before the start of the school year. The school will not be selling or providing these calculators (except in the case of assessment as stated above.)



Be assured that the math and science departments remain committed to developing the math and science skills which students need to be successful in their future endeavours. As educators, we are confident that these calculators will help to enhance student learning as we continue to expect mastery of concepts. We are excited for this new venture into learning and hope that you will join us in that excitement.

If you have any questions about the TI Nspire calculators, or about the implementation of this new expectation, please feel free to contact any of the undersigned. We would be happy to discuss the new experiences in learning that these calculators will provide to our students and teachers.

Sincerely,

A handwritten signature in black ink that reads "Kathy Gordon". The signature is written in a cursive style.

Kathy Gordon
Math Department Team Leader
kathy.gordon@concordiashanghai.com

A handwritten signature in black ink that reads "Todd Gordon". The signature is written in a cursive style.

Todd Gordon
Science Department Team Leader
todd.gordon@concordiashanghai.org

A handwritten signature in black ink that reads "Nicholas Kent". The signature is written in a cursive style.

Nicholas Kent
High School Principal
nicholas.kent@concordiashanghai.org