

TOSH Grade 10 Math Courses

Students will register for either:

☐ **MAT421A: Foundations of Math and Pre-calculus**

Students who have met most curriculum outcomes in junior high should register for MAT421A. This is an academic course that prepares them for either the academic math or pre-calculus stream in grades 11 and 12 **OR**

☐ **MAT421K: Apprenticeship and Workplace Mathematics**

Students who have struggled with math concepts in junior high, or have been on a modified program should take MAT421K. This course prepares students for essential math skills in life and for some programs at the college level. This is not a university-preparatory course. Occasionally students will take MAT421A after a highly successful credit in 421K (at the teacher's recommendation)

Note: Junior High teachers are able to recommend a resource block for support with math if needed. The resource block is for credit and takes up an elective space.

INFORMATION FROM GRADE 9 RECOMMENDATIONS HANDOUT

Math

In grade 9 math there are Foundational Outcomes. Students meeting the majority of these outcomes are prepared to take MAT421A (Academic Grade 10 Math - Foundations Mathematics and Pre-Calculus 10). Students entering MAT421A are expected to be able to:

- Compare and order fractions and decimals.
- Solve problems involving arithmetic operations on fractions and decimals.
- Use the Pythagorean theorem to solve problems.
- Represent repeated multiplication using powers *[only with integral bases (excluding base 0) and whole number exponents]*.
- Solve problems involving powers.
- Demonstrate an understanding of operations on powers *[only with integral bases (excluding base 0) and whole number exponents]*.
- Explain and apply the order of operations, including exponents, with and without technology.
- Add, subtract, multiply, and divide polynomial expressions, concretely, pictorially and 'symbolically' (limited to polynomials of degree less than or equal to 2). The multiplication and division of polynomials is by monomials only.

- Model and solve problems using linear equations of various forms. **NOTE: Students need a strong background in this as the MAT421A course uses these skills in several sections.**

After successfully completing MAT421A, students will take additional Foundations Math courses or Pre-Calculus/Calculus courses. Additional options are available.

Students not meeting these outcomes should enroll in MAT421K (Apprenticeship and Workplace Mathematics 10). Students demonstrating a strong understanding in MAT421K may wish to speak with their grade 10 math teacher about the possibility of taking MAT421A. Otherwise students will complete additional Apprenticeship and Workplace Mathematics courses and/or Applied Mathematics (“Trades Math”). In the event that it is determined that MAT421K is too challenging for a student, the student will take a Practical level math course (MAT451K). Typically this is determined when the student is in MAT421K, but, in the event that numbers permit, it may be possible for a MAT451K course to be offered.

Some students will be recommended to take a math resource block along with MAT421A. They would be enrolling in MAT421A and RES401A. Your teacher will let you know if this is a recommendation for you. TOSH will approve these requests.