

York Mathematics Department Philosophy:

To learn mathematics is to learn to think.

We encourage students to:

- view mathematics as a significant human achievement.
- analyze and generalize.
- model the world around them.
- make judgments based on evidence and reasoning.
- use discussion to hone and refine their thinking.

We offer a rich and challenging curriculum for every student at every level. The York Mathematics environment is based on the following beliefs.

- The study of mathematics is important for every student's future.
- There is a necessary balance between conceptual understanding and becoming skillful with processes.
- Teaching techniques and assessments should be varied to account for different mathematical concepts, different learning styles, and individual strengths and interests.
- Technology should infuse and inform all our courses through exploration, visualization, generalization, verification, and synthesis.
- Students need opportunities to work with teachers and each other in order to make sense of what they are learning. York's Math Lab fosters a sense of community and provides a space for this collaborative work.

Our goal is to develop students' independence and help them to take possession of significant ideas, so that they have the confidence to use mathematics and build on their mathematical understanding as they move beyond York.