

Is there going to be a Provincial Exam in Grade 10? Should that influence which Math course my child should take?

Yes! Changes to the BC high school graduation requirements include the addition of a Grade 10 Graduation Program Exam in each of the three Grade 10 Math courses—Essentials 10, Applications 10 and Principles 10. Grade 10 course marks will be recorded on your child's permanent record card. To ensure success, your child should take the Math course that best suits their ability level, interest and future plans.

What are other people saying?

Our daughter was starting to really hate Math class. It never seemed to make sense to her. Now that she's switched to Applications, not only has her mark gone up but she really seems to be enjoying it!

Doreen B., Parent

I've always loved math! Principles 11 was very challenging and a lot of work but it was worth it. Having done so well at it, I feel a real sense of accomplishment.

Deanna, H.J. Cambie Secondary, Richmond, BC

The BCAMT would like to thank the Richmond School District for developing this brochure and allowing it to be shared with other districts.

BC Association of Mathematics Teachers 2004



BC Association of Mathematics Teachers

Choices in Math 10-12



Information for Parents and Students

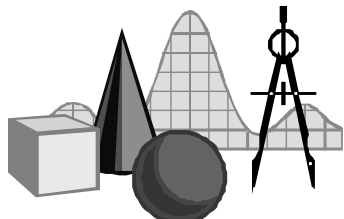
Why are there different Math courses in Grades 10, 11 & 12?

What's the difference between Essentials, Applications and Principles?

Which Math course is best suited to my child?

Who can help us make the decision?

Is there going to be a Provincial Exam for Math in Grade 10?

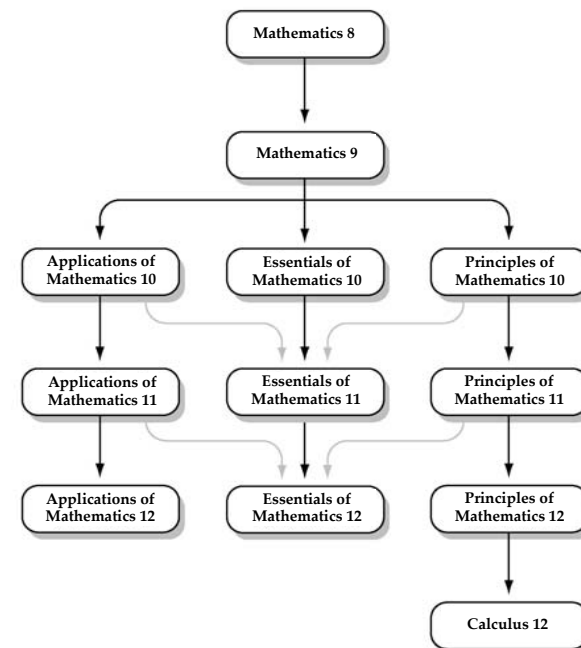


Why are there different Math courses in Grades 10, 11 & 12?

Math is used in different jobs in very different ways. The mathematics used by a retail sales clerk is different from that used by an automotive mechanic or an electrical engineer. To address different abilities, interests and future plans, the Math 10-12 curriculum is delivered in three "Pathways":

- ◆ Essentials
- ◆ Applications
- ◆ Principles

BC SECONDARY MATHEMATICS COURSE STRUCTURE



What are the Pathways?

The Essentials of Mathematics Pathway

This pathway focuses on the basic Math skills that high school graduates will need in today's society to succeed as citizens, workers and consumers. One of the goals of the *Essentials* pathway is that students will learn to use and value the Math of daily life, business, industry and government.

The Applications of Mathematics Pathway

This pathway focuses on the practical uses of Math in real-world situations. It encourages students to develop their mathematical knowledge, skills and attitudes in relation to their lives and possible careers. Students in the *Applications* pathway will use more hands-on activities, technology and projects, and focus less on formal Math.

The Principles of Mathematics Pathway

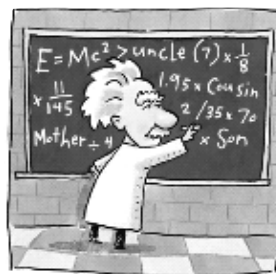
While this pathway does focus on some of the uses of Math in the real world, one of its main goals is to help students develop the formal Math skills needed to continue on with the study of Math and Science after high school. Students in the *Principles* pathway spend a lot of time exploring sophisticated Math concepts while developing their ability to work with abstract notation.




Which Math course is best suited to my child?


While there is no rule about which Math course is right for each student, the decision can be made easier by thinking about your child's:


- ⇒ ability in Math
- ⇒ interest in Math
- ⇒ future education and career plans.



For instance,

 If your child has worked hard in Math 8 or 9, but has had difficulty passing, enjoys working on projects or “hands-on” activities, is planning further study in the Arts or Humanities, or intends to pursue a trade or technical job, then the **Essentials** pathway might be the best choice.

 If your child has been able to maintain a C average or better in Math 9 or Principles of Math 10, enjoys working on projects or “hands-on” activities, is planning further study in the Arts or Humanities, or intends to pursue a trade or technical job, then starting or switching to the **Applications** pathway might be the best choice.

 If your child has managed to earn a high C+ average or better in Math 9 or Principles of Math 10, enjoys the challenges of Math, or is thinking about future education or a career that involves the mathematical sciences, then starting or continuing with the **Principles** pathway might be the best choice.

Your child's education choices after high school depend, in part, on the courses they take in high school. To make an informed decision about which course is best suited for your child, you both need to find out as much as you can about each pathway. You can do this by talking to your child's Principal, counsellor and math teacher. You and your child should make the final decision after carefully considering all three pathways.



Who can help us make the decision?

Talk to your child's math teacher. The teacher has spent a lot of time working with your child and is able to give realistic advice based on your child's ability and interest in Math. Your child's math teacher can recommend the pathway that offers your child the best chance for enjoyment and success.

What happens if we change our minds later?

While switching from Applications to Principles or from Essentials to Applications is not an easy task, your child's math teacher or counsellor can tell you how this might be accomplished. If, after high school, your child changes career paths and needs Principles 11 or 12, community colleges, universities and night schools offer these or equivalent courses.



Can my child get into university or college without Principles 11 or 12?

Yes! There are many different combinations of courses and programs that will allow a student to go to college or university. The specific Math courses that are required by colleges and universities depend entirely on the program a student wishes to enter. While some Arts programs may only require Essentials 11 or Applications 12, many other programs require at least Principles 11. These entrance requirements are different for each college and university. **It is crucial that you check with your child's counsellor, the university or the college to find out which Math courses your child needs to enter a specific program.**



I want my child to study Sciences but their teacher has recommended Applications. What should I do?

While Principles 12 is required for almost all Science programs, it is important to understand why your child's math teacher gave this advice. It is probably because your child has found Math 9 or Principles 10 very challenging and the teacher is worried your child will not be able to succeed by continuing in the Principles pathway. The teacher may also feel that your child's learning style is more suited to a “hands-on”, project-based course such as Applications. If your child does switch to the Applications pathway, their achievement and enjoyment of Math may improve.



More Info This Way!

