Math Courses

Placement in math courses is based on BC transcripts showing math courses completed in the last five years or on an assessment.

Math Foundations 1 to 7

Math Foundations courses provide students with the specific knowledge and skills needed to be successful in Grade 11 math courses. Math Foundations 7 prepares students to take Math 11 Foundations or Pre-Calculus.

Math 11 Workplace

This pathway is designed to provide students with mathematical understandings and critical thinking for apprenticeship and trades programs. Topics include fractions, metric measure, basic algebra, percent, introduction to triangles, graphing and interpreting graphs, basic business and financial mathematics. Requirement is Math 5 level Foundations or Math workplace 10.

Math 11 Foundations

This pathway is designed to provide students with the mathematical understandings and critical thinking skills identified for post-secondary studies in programs that do not require the study of theoretical calculus. Topics include measurement (rates and scales), geometric reasoning (angles and triangles), non-right triangle trigonometry, logical reasoning, spatial puzzles, statistics (normal distribution, interpretation of statistical data), 2-variable linear inequalities, quadratic functions, and history of mathematics.

Math 11 (Pre-Calculus)

This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into post-secondary programs that require the study of theoretical calculus, such as Sciences or Engineering. Topics include expressions and equations (absolute value, radical, rational), trigonometry (angles in standard position, non-right triangles), absolute value functions, reciprocal functions, quadratic functions and equations, systems of equations and inequalities (including quadratic), and arithmetic and geometric sequences.

Math 12 (Pre-Calculus)

This course is required by some specific programs by post-secondary institutions. Topics include transformations; trigonometry including identities; radical, polynomial, rational and exponential functions; permutations and combinations, logarithms.

It is advisable to review your math skills before doing an assessment. You can go to the public library or a book store for practice math books.

Alternatively, here is a list of websites that may help you to prepare for the math assessment:

http://www.khanacademy.org/

Kahn academy – over 2,400 free instructional videos!

http://www.purplemath.com/modules/index.htm

A great site that covers all material, with a detailed explanations.

http://www.texttutoring.com/math/math-11/math-11-systems-of-equations/

This website gives not only sample questions, but also gives the answers with an explanation. Design flaw is that it has the answers right below the questions, so students might be tempted to look straight at the answers without trying the question.

http://www.analyzemath.com/systems/systems.htm

This has a graphing program that helps the students learn how to graph.

http://www.studygs.net/equations.htm

Gives a little flash that allows you to click and drag a number from one side to the other, and it tells you to isolate X. When you click and drag, it tells you what you did in order to move it to the other side as well. It also provides examples that are difficult to solve (answers are provided with explanation), and it also states basic rules, such as what a square root of something means, etc.

http://www.onlinemathlearning.com/algebra-math-games.html

This is a website helps students learn how to do basic algebra games.

http://www.mathocean.com/2009/11/solving-inequalities-graphing.html

Another website that helps students with graphing, but this one contains two equations instead of one. However, it is also a great wall of text with only a few diagrams.

http://www.bcmath.ca/M11P/m11pch7/m11pc71/m11pc71.html

A powerpoint that explains how to find everything on the circle, except the chords.

http://www.factmonster.com/math/knowledgebox/

Math gaming site.

http://www.mathwarehouse.com/trigonometry/law-of-cosines-formula-examples.php

Invergarry and Queen Elizabeth Adult Education

Tips on Preparing for the Mathematics Assessment

A number of different Mathematics courses are available to best suit a variety of purposes.

The **Mathematics Foundation classes, levels 1-7**, assist students with the basics of math to help prepare them for the higher level courses.

To prepare for the **Mathematics levels 1 - 7 assessment**, we recommend reviewing:

-Reading time from a digital and analog clock

-Counting Canadian currency

-Identifying basic geometric shapes

-Adding, subtracting, multiplying, and dividing for:

      1) Numbers that are one – six digits in length

      2) Mixed and improper fractions

      3) Polynomials

-Determining perimeter for two dimensional shapes

-Converting and calculating using percentages, fractions and decimals

-Solving for and substitution with unknown variables

-Reading charts and graphs

-Rounding to the nearest tenth, hundredth, etc. decimal place

-Identifying fractions, denominators, and numerators

-For triangles: sum of angles, types of triangles, similar triangles, Pythagoras' Theorem and basic trigonometry

-For circles: radius, diameter, and circumference

-Determining surface area and volume or two and three dimensional shapes

-Calculating mode, mean, and median for a given set of data

-Inequality signs - $>$, $<$, $\leq$, $\geq$

-Using ratios

-Powers, bases, and exponents

-Square roots

-Solving for systems of linear equations-Using algebraic formulas

-Relationship between parallel lines and angles

-SI (metric) and Imperial systems of measurement

-Linear equations, coordinate geometry, and slope

Invergarry and Queen Elizabeth Adult Education

Tips on Preparing for the Mathematics Assessment

A number of different Mathematics courses are available to best suit a variety of purposes.

The Mathematics 11 classes are split into three different pathways:

1) **Apprenticeship and Workplace**
2) **Foundations**
3) **Pre-Calculus**

Students should consider which pathway would be best suited for them and their intended career/school future before registration.

In advance of taking the Mathematics 11 assessment, we recommend reviewing:

-SI and Imperial measurements; converting between the two

-Radicals, mixed and entire, to the second, third, fourth, etc. root

-Using algebraic formulas

-Relationship between parallel lines and angles

-SI (metric) and Imperial systems of measurement

-Linear equations, coordinate geometry, and slope

-Solving and graphing: function, absolute value, radical, and quadratic equations

-Volume and surface area of 2D and 3D geometric shapes, simple and composite

-Trigonometric ratios (sine, cosine, and tangent) and reference angles

-Simple and compound interest

-Ratios

-Sine laws for non-right angle triangles

-Solving numerical patterns

-Solving systems of linear equations