

New Westminster Online Learning School

Pre-Calculus Math 12:

Course Description

- Students considering taking this course should have, within the past 5 years, achieved at least a C+ in Pre-Calculus 11 or an equivalent course or by our assessment.
- This course builds on the concepts from Pre-Calculus 11 in that polynomial, radical, rational, exponential, logarithmic, and trigonometric functions are used to represent real world situations. Changes to the basic graphs of these functions and combining two functions by addition, subtraction, multiplication or division, as well as the relationships between geometric patterns are also explored.

Course Expectation

Students are expected to complete their online course within a 4-5 month period of time. If additional time is needed, contact your course instructor.

Enduring Understanding/Big Ideas_(taken right from bced.gov.bc.ca)

Students will focus on:

- Using inverses is the foundation of solving equations and can be extended to relationships between functions.
- Understanding the characteristics of families of functions allows us to model and understand relationships and to build connections between classes of functions.
- Transformations of shapes extend to functions and relations in all of their representations.

Specific Learning Outcomes

https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/curriculum/mathematics/en_mathematics_12_pre-calculus_elab.pdf

Course Content

Unit 1	Polynomial Expressions & Functions
Unit 2	Radical and Rational Functions
Unit 3	Transforming Graphs of Functions
Unit 4	Combining Functions
Unit 5	Exponential & Logarithmic Functions
Unit 6	Trigonometry
Unit 7	Trigonometric Equations & Identities
Unit 8	Geometric Sequences & Series

Student Learning Activities and Strategies

- The online lessons use a combination of text, short videos, and animations.
- This course aims to promote the development of mathematical understanding through inquiry and problem solving.

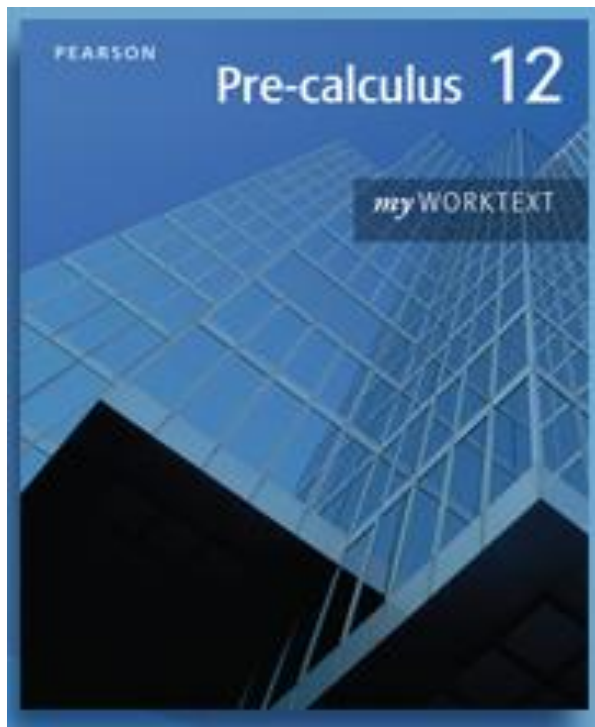
Assessment

- This course has eight units. There is one test per unit. You must complete the tests in order starting with Unit 1.
- The tests are timed, and you will have 50 minutes to complete each of them.
- You are expected to complete one Unit Test every 2-3 weeks.
- The Unit Tests can be done online from any location where a student has the use of reliable technology with a dependable internet connection. Please note though that at any time during this course, students may be required to come on-site to write a test.
- There is no final exam. Students must complete all 8 tests to obtain a course mark.

Evaluation

A student's final mark in this course is based on their eight Unit Tests submissions.

Resources



Students could get by without the Pre-calculus 12 myWORKTEXT for Unit 1, but you will definitely need it for Units 2-7.

There are a few ways to do this:

1. If you're an adult or out-of-district student, buy a book for \$30 from Columbia Square Education Centre (#200 – 1065 Columbia St, Phone: 604-517-6191) between the hours of 9:30am-3:30pm on school days. Workbook fees are non-refundable.

or

2. If you currently attend NWSS, borrow a book from Room #3039 on the top floor.