

# PreCalculus 12 Minibook

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# Preface

This minibook summarizes the key concepts and common examples in Pre-Calculus 12 to aid students in learning and reviewing. The content follows the curriculum in BC, Canada.

## 0.1 Motivation

This minibook ...

## 0.2 Suggestions to the Readers

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## 0.3 About the Author

...

## 0.4 How to Learn Math?

...



# Review/Prerequisite

This chapter summarizes what you are expected to know before reading this book, or take pre-calculus 12.

## 0.5 Order of Operations

...

## 0.6 Set

...





## Chapter 1

# Function Transformations

This chapter introduces ...



## Chapter 2

# Polynomials and Polynomial Functions

...



## Chapter 3

# Rational, Radical, and Absolute Value Functions

### 3.1 Proportionality

#### 3.1.1 Direct Proportionality

...

#### 3.1.2 Inverse Proportionality

...



## Chapter 4

# Exponential and Logarithmic Functions

### 4.1 Equations

Here is an equation.

$$f(k) = \binom{n}{k} p^k (1-p)^{n-k} \quad (4.1)$$

You may refer to using `\@ref{eq:binom}`, like see Equation (4.1).

### 4.2 Theorems and proofs

Labeled theorems can be referenced in text using `\@ref{thm:tri}`, for example, check out this smart theorem 4.1.

**Theorem 4.1.** *For a right triangle, if  $c$  denotes the length of the hypotenuse and  $a$  and  $b$  denote the lengths of the **other** two sides, we have*

$$a^2 + b^2 = c^2$$

Read more here <https://bookdown.org/yihui/bookdown/markdown-extensions-by-bookdown.html>.

### 4.3 Callout blocks

The R Markdown Cookbook provides more help on how to use custom blocks to design your own callouts: <https://bookdown.org/yihui/rmarkdown-cookbook/custom-blocks.html>



## Chapter 5

# Geometric Sequences and Series

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## Chapter 6

# Trigonometric Functions

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## Chapter 7

# Trigonometric Identities

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## Chapter 8

# Conics

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## Chapter 9

## Other Topics

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