

# Saturday Workshop Series: Preparing for University Mathematics

Are you feeling a little under-prepared for your math course this semester?  
Need to brush up on your fundamentals?

The Mathematics Help Centre is offering a three weekend workshop series on the topics most important to success in university, all of which are **TOTALLY FREE!**

## Day 1 (Jan 21)

### Unit 1A: Algebra

- Factoring Expressions
- Multiplying and Dividing Rational Expressions

### Unit 1B: Slopes and Lines

- Slope of a Line
- Equations of Lines
- Parallel and Perpendicular Lines
- Horizontal and Vertical Lines

### Unit 1C: Word Problems

- Interpreting Word Problems
- Writing and Solving Equations from Word Problems

## Day 2 (Jan 28)

### Unit 2A: Algebra

- Adding and Subtracting Rational Expressions
- Solving Quadratic and Rational Equations

### Unit 2B: Exponents

- Graphs of Exponential Functions
- Law of Exponents
- The Natural Exponent  $e$

### Unit 2C: Logarithms

- Graphs of Logs
- Log Laws
- The Natural Log
- Expanding Logarithms

## Day 3 (Feb 4)

### Unit 3A: Algebra

- Dealing with Radicals (Square/Cube roots, etc.)
- Absolute Values

### Unit 3B: Functions

- Composition of Functions
- Simplifying  $f(x + h) - f(x)$  (Extremely Helpful for Calculus)

### Unit 3C: Trigonometry

- Right Angle Trigonometry
- Sine, Cosine and Tangent
- Special Values and the Unit Circle

Suitable for students registered in any of the following courses:  
MATH 1210, MATH1240, MATH 1300, MATH 1500, MATH 1510, MATH 1520,  
MATH 1700 or MATH 1710

Each of the above workshops are totally independent; attend as many or as few of them as you wish! All three workshops will be from 10 am - 1 pm.

Please visit the Math Help Centre Website with this [link](#) to register. There are limited spots available, so early registration is advised. For more information contact [Clifford.Allotey@umanitoba.ca](mailto:Clifford.Allotey@umanitoba.ca)