

Refresh and Supplemental Resources for Pre-Calculus

These resources are designed to be used to help students refresh their prerequisite course knowledge and provide supplementary course resources.

Pre-Calc Topic	Algebra/Trig Prerequisite Videos	Algebra/Trig Prerequisite Practice Problems
Function Representations	Functions, Absolute value	Functions
Catalog of Functions	Exponents , Radicals	Exponential Functions , Logarithm Functions
Transformations of Functions	Graphing and common graphs	Common Graphs
Trig Identities	Base Trig Identities	
Trig Formulas	Evaluating Trig Functions , Unit Circle	Evaluating Without Calculator
Applications of Trig Functions	Graphs of trig functions , trig formulas , trig function evaluation	Trig Functions , Graphs of Trig Functions
Law of Sines/Cosines	Evaluating Trig Functions	Trig Functions Practice
Vectors	Pythagorean Theorem	Practice using Pythagorean
Partial Fraction Decomposition	Factoring	Factoring in Algebra
Systems of Inequalities	Systems of Equations in Two Variables , Inequalities	Systems of Equations , Solving Inequalities
Conic Sections	Completing the Square	Complete the Square

Additional Useful Resources:

- Just Math Tutorials (<http://patrickjmt.com/>) – short videos showing how to solve problems from algebra, trigonometry, calculus, differential equations, linear algebra and probability and statistics
- Khan Academy (<https://www.khanacademy.org/>) – structured online mathematics course materials, including instructional videos and practice problems
- Paul’s Online Notes (<https://tutorial.math.lamar.edu/problems/calci/calci.aspx>) - mathematics practice problems with solutions
- Desmos (<https://www.desmos.com/calculator>) - online graphing calculator
- WolframAlpha (<https://www.wolframalpha.com/>) – multifunctional computational platform that helps solve equations, graph functions, look up formulas, etc.
- Algebra Cheat Sheet (https://tutorial.math.lamar.edu/pdf/Algebra_Cheat_Sheet.pdf), Trigonometry Cheat Sheet (https://tutorial.math.lamar.edu/pdf/Trig_Cheat_Sheet.pdf), and Calculus Cheat Sheet (https://tutorial.math.lamar.edu/pdf/calculus_cheat_sheet_all.pdf)