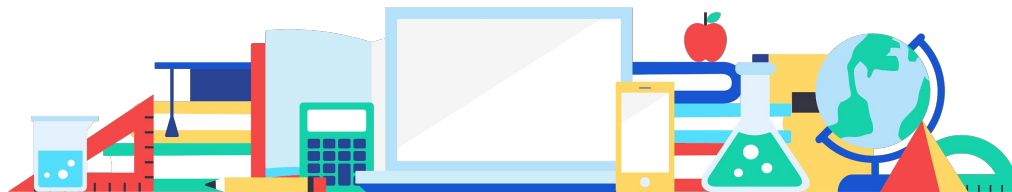




Precalculus Topics & Resources

Updated March 2020



Key Topics

Key Topics Covered in Pre-Calculus

- Functions & Graphing Functions
 - ◆ Linear functions
 - ◆ Quadratic functions
 - ◆ Polynomial functions
 - ◆ Domain & range
 - ◆ Composition of functions
 - ◆ Inverse functions
 - ◆ Rational & irrational functions
- Exponential & Exponential Functions
 - ◆ Exponential functions
 - ◆ Natural exponential function
 - ◆ Logarithms and logarithmic functions
 - ◆ Natural & common logarithms
 - ◆ Change of base formula
- Trigonometric functions
- Conics
 - ◆ Circles
 - ◆ Parabolas
 - ◆ Hyperbolas
 - ◆ Ellipses
- Complex numbers
 - ◆ Arithmetic with complex numbers
 - ◆ Complex conjugates
 - ◆ Polar form of complex numbers
 - ◆ The complex plane
- Probability and statistics
 - ◆ Independent vs. dependent events
 - ◆ Factorials
 - ◆ Permutations & combinations
- Systems of equations & matrices
 - ◆ Gaussian elimination
 - ◆ Matrix arithmetic
 - ◆ Determinants
 - ◆ Matrix inverses
- Introduction to series
 - ◆ Arithmetic sequences
 - ◆ Geometric sequences
 - ◆ Binomial theorem

Pre-Calculus

Additional Resources

- <https://www.khanacademy.org/math/precalculus>
- <http://wp.vcu.edu/precalculus/files/2013/08/Precalculus-3rd-ed.pdf>
- http://faculty.bard.edu/bloch/precalculus_review_gray.pdf
- <https://www.themathpage.com/aPreCalc/precalculus.htm>
- https://math.tntech.edu/machida/MATH_GO/Precalculus_Review/
- <https://www.ixl.com/math/precalculus>
- <https://wa01001167.schoolwires.net/cms/lib/WA01001167/Centricity/Domain/1630/Precalculus%20Book.pdf>