

UAF DMS Guidelines for
MATH 156X –Precalculus

Math 156X Syllabus Guidelines

- identify the max/min value
modeling with quadratics
- Polynomial Functions
 - graph by finding zeros and identifying end behavior
 - identify the equation from a graph
 - graph a rational function by identifying intercepts and asymptotes
- Exponential and logarithmic Functions
 - graph a transformed exponential/ logarithmic function
 - identify the equation of a graph of an exponential function
 - use laws of logarithms to evaluate, combine or expand logarithmic expressions
- Exponential and Logarithmic Equations
 - Solve various types of exponential and logarithmic equations algebraically
 - modeling with exponential functions

Angle Measures

Trigonometric Values

- basic angles
- coterminal angles
- for a given point

Trigonometric Graphs

- find domain and range
- find amplitude, phase shift, and period
- find intercepts and asymptotes

Solve Trigonometric Equations

- Linear trigonometric equations
- Equation involving either quadratic, factoring, or the use of identities

At least two of the following:

- Evaluate inverse trigonometric functions
- Evaluate composition of trigonometric and inverse trigonometric function (both orders)
- Domain, range, and properties of inverse trigonometric functions

Applications

- Right angle trigonometry (such as angle of elevation/depression)
- Laws of Sines and Cosines

