

# Math D: Course Topics and Timeline

Course Topics. (Section numbers from **McKeaque** 6th Edition.)

- Categories:
1. Must be covered.
  2. Must be covered at least briefly.
  3. Do not cover unless you have extra time after adequately doing.

Timeline	Category	Section	Topic
Covered in class by Week 2	1	1.1	Angles, Degrees, and Special Triangles
	2	1.2	The Rectangular Coordinate System
	1	1.3	Definition I: Trigonometric Functions
	1	1.4	Introduction to Identities
	1	1.5	More on Identities
Covered in class by Week 5	1	2.1	Definition II: Right Triangle Trigonometry
	1	2.2	Calculators and Trigonometric Functions of an Acute Angle
	1	2.3	Solving Right Triangles
	1	2.4	Applications
	1	2.5	Vectors: A Geometric Approach
	1	3.1	Reference Angle
	1	3.2	Radians and Degrees
	1	3.3	Definition III: Circular Functions
	1	3.4	Arc Length and Area of a Sector
	2	3.5	Velocities
Covered in class by Week 8	1	4.1	Basic Graphs
	1	4.2	Amplitude, Reflection and Period
	1	4.3	Vertical Translation and Phase Shift
	1	4.4	The Other Trigonometric Functions
	1	4.5	Finding an Equation from Its Graph
	2	4.6	Graphing Combinations of Functions
Covered in class by Week 10	1	4.7	Inverse Trigonometric Functions
	1	5.1	Proving Identities
	1	5.2	Sum and Difference Formulas
	1	5.3	Double-Angle Formulas
	1	5.4	Half-Angle Formulas
Covered in class by Week 11	1	5.5	Additional Identities
	1	6.1	Solving Trigonometric Equations
	1	6.2	More on Trigonometric Equations
	1	6.3	Trigonometric Equations Involving Multiple Angles
Covered in class by Week 13	1	6.4	Parametric Equations and Further Graphing
	1	7.1	The Law of Sines
	1	7.2	The Ambiguous Case
	1	7.3	The Law of Cosines
	3	7.4	The Area of a Triangle
	1	7.5	Vectors: An Algebraic Approach
Covered in class by Week 15	1	7.6	Vectors: The Dot Product
	1	8.1	Complex Numbers
	1	8.2	Trigonometric Form for Complex Numbers
	1	8.3	Products and Quotients in Trigonometric Form
	1	8.4	Roots of a Complex Number
	1	8.5	Polar Coordinates
	3	8.6	Equations in Polar Coordinates and Their Graphs