

MA146: Trigonometry

Baker University — Fall 2023

Each of the following comes from the textbook *Trigonometry* by Michael Corral.

Exam 1: Right Angle Trigonometry

date	day	section	topic(s)
8/23	W	§1.1: Angles	<ul style="list-style-type: none">◦ classifying angles◦ classifying triangles◦ Pythagorean Theorem
8/25	F	§1.2: Trigonometric Functions of an Acute Angle	<ul style="list-style-type: none">◦ trigonometric functions◦ special triangles◦ Cofunction Theorem

date	day	section	topic(s)
8/28	M	§1.3: Applications and Solving Right Triangles	<ul style="list-style-type: none">◦ word problems◦ algebra with triangles
8/30	W	§1.4: Trigonometric Functions of Any Angle	<ul style="list-style-type: none">◦ Cartesian coordinates◦ reference angles◦ trigonometric functions
9/1	F	§1.5: Rotations and Reflections of Angles	<ul style="list-style-type: none">◦ rotation formulas◦ reflection formulas◦ even / odd functions

date	day	section	topic(s)
9/4	M	<i>Labor Day</i>	
9/6	W	Exam 1 Review	
9/8	F	Exam 1	

Exam 2: General Triangles

date	day	section	topic(s)
9/11	M	§2.1: The Law of Sines	<ul style="list-style-type: none"> ○ The Law of Sines ○ SAA and SSA triangles ○ ambiguous triangles
9/13	W	§2.2: The Law of Cosines	<ul style="list-style-type: none"> ○ The Law of Cosines ○ SAS and SSS triangles ○ SSA triangles, revisited
9/15	F	§2.4: The Area of a Triangle	<ul style="list-style-type: none"> ○ SAS triangles ○ AAA triangles with one known side ○ Heron's Formula

date	day	section	topic(s)
9/18	M	Exam 2 Review	
9/20	W	Exam 2	

Exam 3: Trigonometric Identities

date	day	section	topic(s)
9/22	F	§3.1: Basic Trigonometric Identities	<ul style="list-style-type: none"> ○ reciprocal identities ○ Pythagorean Identities ○ basic examples

date	day	section	topic(s)
9/25	M	§3.2: Sum and Difference Formulas	<ul style="list-style-type: none"> ○ Sum Formula for Sine ○ Sum Formula for Cosine ○ basic examples
9/27	W	§3.3: Double-Angle and Half-Angle Formulas	<ul style="list-style-type: none"> ○ Double-Angle for Sine ○ Double-Angle for Cosine ○ basic examples
9/29	F	§3.3: Double-Angle and Half-Angle Formulas	<ul style="list-style-type: none"> ○ Half-Angle for Sine ○ Half-Angle for Cosine ○ basic examples

date	day	section	topic(s)
10/2	M	Using and Proving Trigonometric Identities	
10/4	W	Exam 3 Review	
10/6	F	Exam 3	

Exam 4: Radian Measure

date	day	section	topic(s)
10/9	M	§4.1: Radians and Degrees	<ul style="list-style-type: none"> ○ converting between degrees and radians ○ the Unit Circle
10/11	W	§4.2: Arc Length §4.3: Area of a Sector	<ul style="list-style-type: none"> ○ arc length formula ○ sector area formula ○ basic examples
10/13	F	<i>Fall Break</i>	

date	day	section	topic(s)
10/16	M	§4.4: Linear and Angular Speed	<ul style="list-style-type: none"> ○ distance-rate-time formula ○ word problems
10/18	W	Exam 4 Review	
10/20	F	Exam 4	

Exam 5: Graphing, Inverse Functions, and Polar Coordinates

date	day	section	topic(s)
10/23	M	§5.1: Graphing Trigonometric Functions	<ul style="list-style-type: none"> ○ graphing via tables ○ graphing via Unit Circle ○ domain and range ○ vertical asymptotes
10/25	W	§5.2: Graphs of Trigonometric Functions	<ul style="list-style-type: none"> ○ transformations of graphs ○ amplitude ○ period ○ phase shift
10/27	F	§5.3: Inverse Trigonometric Functions	<ul style="list-style-type: none"> ○ domain and range ○ horizontal asymptotes ○ graphing via symmetry

date	day	section	topic(s)
10/30	M	§6.1: Solving Trigonometric Functions	<ul style="list-style-type: none"> ○ Quadratic Formula ○ general solutions
11/1	W	§6.1: Solving Trigonometric Functions	<ul style="list-style-type: none"> ○ Sum Formulas ○ Double-Angle Formulas ○ Half-Angle Formulas
11/3	F	§6.4: Polar Coordinates	<ul style="list-style-type: none"> ○ Cartesian to polar conversion ○ polar to Cartesian conversion ○ basic examples

date	day	section	topic(s)
11/6	M	§6.4: Polar Coordinates	<ul style="list-style-type: none"> ○ functions in polar coordinates ○ graphing in polar coordinates
11/8	W	Exam 5 Review	
11/10	F	Exam 5	

date	day	section	topic(s)
11/13	M	Final Exam Review	
11/15	W	Final Exam Review	
11/17	F	Final Exam Review	

date	day	section	topic(s)
11/20	M	Final Exam	
11/22	W	<i>Thanksgiving Break</i>	
11/24	F	<i>Thanksgiving Break</i>	

Final Exam: Thursday, December 14 from 1:00 to 4:00 PM in Mulvane 202