

**The following sections from the text are to be covered.** Submitted work for homework, quizzes, worksheets, tests, and the final exam must show **all** work. Only writing the answer of each problem is **not** enough.

Precalculus Fall 2023

Instructors will assign exercises from Technology Highlights throughout the semester.

Week	Section	Page	<b>Suggested Practice Problems</b>
1	3.7	311	Polynomial and Rational Inequalities 17, 28, 33, 35, 41, 49, 54, 61, 67, 70, 88, 89, 97
1 & 2	4.1	350	One-to-One and Inverse Functions 8, 10, 21, 22, 44, 47, 48, 52, 53, 62, 71, 74, 77, 80, 84, 87, 102
2	4.2	362	Exponential Functions 10, 11, 24, 25, 35, 38, 43, 46, 49, 52, 56, 59, 64, 70, 71, 75, 77
3	4.3	375	Logarithms and Logarithmic Functions 11, 12, 17, 22, 29, 34, 35, 41, 46, 47, 50, 55, 58, 61, 64, 67, 73, 76, 78, 84, 91
3	4.4	392	Properties of Logarithms; Solving Exponential/Logarithmic Equations 9, 12, 15, 18, 21, 24, 36, 37, 41, 45, 50, 53, 59, 65, 66, 75, 77, 83, 85, 91, 93, 94, 103, 106, 109, 110, 111, 117, 119, 127, 132
4	5.1	435	Angle Measure, Special Triangles, and Special Angles 7, 27, 30, 33, 36, 40, 41, 44, 46, 48, 51, 53, 56, 61, 64, 67, 70, 73, 79, 82, 87, 90, 95, 98, 99, 100, 102, 105, 107
4 & 5	5.2	449	Unit Circles and the Trigonometry of Real Numbers 9, 12, 13, 14, 21, 22, 27, 28, 31, 34, 37, 38, 39, 40, 41, 43, 44, 47, 50, 54, 55, 71, 73, 76, 78, 79, 84, 87, 90, 93, 98, 99, 101
5	5.3	466	Graphs of the Sine and Cosine Functions; Cosecant and Secant Functions 11, 14, 15, 18, 28, 29, 33, 36, 45, 46, 47, 48, 49, 50, 53, 54, 57, 61, 64, 69
5 & 6	5.4	479	Graphs of Tangent and Cotangent Functions 11, 12, 13, 14, 17, 20, 21, 24, 25, 28, 33, 35, 39, 40, 42, 43, 45, 50, 54
6	5.5	494	Transformations and Applications of Trigonometric Graphs 15, 16, 17, 18, 25, 28, 30, 33, 37, 38, 43, 47, 48
6 & 7	5.6	506	The Trigonometry of Right Triangles 9, 10, 13, 16, 17, 20, 23, 26, 27, 30, 31, 34, 35, 42, 49, 54, 71, 72, 75, 78, 79
7	5.7	519	Trigonometry and the Coordinate Plane 7, 9, 12, 14, 15, 18, 23, 33, 36, 38, 43, 44, 45, 46, 51, 54, 55, 56, 59, 61, 63, 70, 72, 75, 80, 84, 85, 108
7 & 8	6.1	549	Fundamental Identities and Families of Identities 15, 18, 21, 24, 27, 30, 33, 36, 39, 41, 44, 47, 50, 53, 56, 59, 65, 68, 69, 72

8	6.2	555	Constructing and Verifying Identities 14, 17, 20, 23, 26, 29, 34, 37, 40, 45, 48, 52, 55, 58
8 & 9	6.3	563	The Sum and Difference Identities 7, 10, 12, 13, 16, 17, 20, 21, 22, 25, 26, 27, 28, 30, 31, 33, 36, 39, 42, 45, 48, 49, 52, 57, 60, 65, 66, 76
9 & 10	6.4	576	The Double-Angle, Half-Angle, and Product-to-Sum Identities 7, 12, 14, 15, 17, 20, 23, 24, 28, 30, 32, 35, 37, 40, 45, 48, 49, 52, 54, 56, 59, 60, 65, 66, 67, 73, 76, 77, 80, 82, 83, 89, 92, 97
10	6.5	593	The Inverse Trig Functions and Their Applications 7, 10, 15, 17, 21, 22, 26, 28, 34, 40, 41, 44, 45, 48, 52, 53, 54, 57, 62, 63, 66, 67, 69, 70, 72, 75, 91, 93
10	5.6	507	The Trigonometry of Right Triangles (Applications) 43, 44
11	6.6	606	Solving Basic Trig Equations 7, 13, 16, 17, 20, 24, 26, 31, 32, 39, 42, 44, 45, 46, 47, 58, 59, 62, 66, 71, 72, 76, 77, 81, 82, 84, 87, 93, 99
11 & 12	6.7	615	General Trig Equations and Applications 7, 12, 13, 16, 17, 22, 23, 27, 29, 34, 37, 40, 45, 53
12	7.1	641	Oblique Triangles and the Law of Sines 8, 11, 15, 20, 25, 27, 30, 33, 36, 40, 43, 47, 50, 51, 64, 65, 69
13	7.2	653	The Law of Cosines; the Area of a Triangle 7, 10, 11, 15, 18, 21, 27, 37, 40, 41, 48, 49
13 & 14	8.1	727	Linear Systems in Two Variables with Applications 15, 25, 30, 37, 45, 48, 66
13 & 14	8.2	740	Linear Systems in Three Variables with Applications 11, 15, 20, 25, 33, 39, 54, 61
13 & 14	8.5	776	Solving Linear Systems Using Matrices and Row Operations 11, 14, 15, 16, 33, 38, 39, 41, 43, 53, 54
13	8.7D	801	Solving Linear Systems Using Matrix Operations 45, 48, 49, 52
13	8.8A	811	Applications of Matrices and Determinants: Cramer's Rule, Geometry, and More 9, 12, 17
14	10.1	946	Sequences and Series 11, 16, 27, 30, 35, 41, 46, 53, 59, 62, 71, 75, 81, 87
14	10.2	953	Arithmetic Sequences 9, 15, 25, 34, 42, 43, 48, 51, 57, 63, 71
15	10.3	962	Geometric Sequences 8, 9, 11, 20, 33, 39, 47, 53, 59, 65, 71, 77, 89, 92, 99, 101, 110, 113
15	10.7	1005	The Binomial Theorem 15, 17, 20, 25, 28, 31, 35, 36