

MAT 1275 College Algebra and Trigonometry

Text: McGraw-Hill Custom Textbook containing material from Intermediate Algebra, 3rd ed., by Miller, O'Neill and Hyde (sessions 1-16 and 26-29) and Trigonometry, 2nd ed. by Coburn (sessions 18-25).

Session	Topic	Chapter, Section, and Pages	Homework
1	Properties of Integer Exponents Adding and Subtracting Rational Expressions	Chapter 4, Section 4.1, pages 314-318 Chapter 5, Section 5.3, pages 431-438	p. 321: 11-29(odd),33,35,41,47,63,67,75 p.439: 7-23, 27-49 odd
2	Complex Fractions	Chapter 5, Section 5.4, pages 441-446	p.447: 9-15,17-23 odd, 31,33
3	Fractional Equations	Chapter 5, Section 5.5 pages 449-455	p.445: 9- 33 odd
4	Roots and Radicals Rational Exponents	Chapter 6, Section 6.1, pages 492-498 Chapter 6, Section 6.2, pages 503-507	p. 500: 9-37 (odd),59,65,67,79 p. 508: 11,15,19,25,29,33,41, 45,53,65,73,81,93
5	Simplifying Radical Expressions Addition and Subtraction of Radicals	Chapter 6, Section 6.3, pages 510-514 Chapter 6, Section 6.4, pages 517-519	p. 515: 9,13,17,21,25,33,39,55,59,63,79 p. 520: 15,19,23,35,37,41,51,55,57,61,79
6	Multiplication of Radicals	Chapter 6, Section 6.5, pages 522-526	p. 528: 11,17,19,21,23,25,29,31,35,37,55,57,61,63, 67,77,79,87
7	Division of Radicals and Rationalization	Chapter 6, Section 6.6, pages 536-537 (skip examples 4 and 6)	p. 538: 11,13,17,21,31,35,39,53,57,63,67,71,77,81
8	Solving Radical Equations	Chapter 6, Section 6.7, pages 540-543	p. 547: 11-16,21-24,37-42
9	Administer First Examination Complex Numbers	Chapter 6, Section 6.8, pages 550-557	p. 558: 15-27,31-35,53-57,61-69,81-89 odd
10	Quadratic Equations The Square Root Property and Completing the Square	Chapter 4, Section 4.8 pages 388-390 (omit example 2) Chapter 7, Section 7.1, pages 574-579	p. 398: 17-36 all p. 580-581: 3-17,21-27,31-53 odd
11	The Quadratic Formula	Chapter 7, Section 7.2, pages 583-585,588- 594 (Derive the quadratic formula)	p. 595: 9-25,39-55 odd, 69,73,77,81,85
12	Applications of Quadratic Equations	Chapter 4, Section 4.8, pages 392-394 Chapter 7, Section 7.2, page 586	p. 398: 61,65,67,69,71 p. 595: 41,43,47
13	Graphs of Quadratic Functions	Chapter 7, Section 7.4, pages 604-612 Chapter 7, Section 7.5, pages 618-621	p. 613: 11-15,19-23,29-35, 45,47,51-61 odd p. 624: 17-23 odd, 29,31,37,41,43
14	Distance Formula, Midpoint and Circles Perpendicular Bisector	Chapter 9, Section 9.1, pages 746-751	p. 751: 5,9,11,13,23-31 odd, 39,41,45,59,61,63,67,71 Supplemental Problems on Perpendicular Bisector

Session	Topic	Chapter, Section, and Pages	Homework
15	Systems of three Linear Equations in Three Variables	Chapter 3, Section 3.6, pages 278-285.	p. 286: 11-17 odd, 21, 23, 27, 33-37 odd
16	Determinants and Cramer's Rule (optional) Systems involving Nonlinear Equations	Appendix A.1, pages A-1 to A-9. Chapter 9, Section 9.4, pages 776-780.	p. A-10: 35-45 odd, 49, 55, 57. p. 782: 23-37 odd, 49
17	Midterm Examination		1 session
18	Angle Measure and Special Triangles The Trigonometry of Right Triangles	Chapter 1, Section 1.1, pages 2-6 Chapter 2, Section 2.1, pages 46-50	p. 7: 45-57 odd p. 51: 7-21 odd
19	Solving Right Triangles Applications of Static Trigonometry	Chapter 2, Section 2.2, pages 54-56 Chapter 2, Section 2.3, pages 63-66	p. 57: 7-47 odd p. 69: 35-38 all
20	Angle Measure in Radian Trigonometry and the Coordinate Plane	Chapter 3, Section 3.1, pages 90-93 Chapter 1, Section 1.3, pages 22-27	p. 95: 25-39 odd, 43, 45, 49-61 odd, 67-71 odd p. 28: 25-31 odd, 45, 47, 55-63 odd, 64, 73-79 odd
21	Unit Circles	Chapter 3, Section 3.3, pages 108-113	p. 115: 29-35 odd, 37-40 all
22	Graphs of the Sine and Cosine Functions Graphs of Tangent and Cotangent Functions (optional)	Chapter 4, Section 4.1, pages 134-144 Chapter 4, Section 4.2, pages 153-159	p. 145: 1 – 3 all, 17-29 odd, 33-39 odd p. 160: 15,19,21,39,43,47
23	Fundamental Identities and Families of Identities	Chapter 1, Section 1.4, pages 31-35 Chapter 5, Section 5.1, pages 212-214	p. 35: 11-37 odd p. 216: 13-29 odd,37,43,51
24	Trigonometric Equations	Chapter 6, Section 6.3, pages 284-290	p. 292: 13,17,21,25,31,35,43-49 odd, 79, 80
25	Oblique Triangles and the Law of Sines The Law of Cosines	Chapter 7, Section 7.1, pages 316-322 Chapter 7, Section 7.2, pages 329-332	p. 324: 7-23 odd p. 338: 7-11 odd, 21-29 odd
26	Third Examination Exponential Functions	Chapter 8, Subsections 8.3.1, 8.3.2, 8.3.4.	p. 678: 9-25 odd, 43, 49
27	Logarithmic Functions	Chapter 8, Section 8.4, pages 682-685 and example 8, 9.	p. 690: 11-61 odd
28	Properties of Logarithms Compound Interest	Chapter 8, Section 8.5, pages 696-700. Chapter 8, Section 8.6, pages 704-707 (omit example 3).	p. 701: 17-29 odd, 45-55 odd, 63-69, 77, 79, 89 p. 712: 11, 13
29	Exponential Equations	Chapter 8, Section 8.7, pages 721-726.	p. 726: 39-49 odd, 55- 61 odd, 73, 75, 77, 79, 85
30	Final Examination		1 session