

MAT 1275: College Algebra and Trigonometry

Text: McGraw-Hill Custom Textbook containing material from

Intermediate Algebra, 5th ed., by Miller, O'Neill and Hyde and Trigonometry, 2nd ed. by Coburn

| Session | Date | Topic | Chapter, Section, and Pages | Suggested Homework |
|---------|--|--|--|---|
| 1 | Jan 29 (M) 2018 | Properties of Integer Exponents (Review) | Chapter 4, Section 4.1, pages 320-324 | p. 327: 11-29 odd, 33,35,41,47,63,67,75 |
| 2 | Jan 31 (W) 2018 | Adding and Subtracting Rational Expressions (Review) Complex Fractions | Chapter 5, Section 5.3, pages 437-444 Chapter 5, Section 5.4, pages 447-452 | p.445: 7-23 odd, 27-49 odd p.452: 9-15 odd,17-23 odd, 31,33 |
| 3 | Feb 5 (M) 2018 | Complex Fractions (continued) Solving Rational Equations (Review) | Chapter 5, Section 5.5 pages 454-460 | p.460: 9- 33 odd |
| 4 | Feb 7 (W) 2018 | Definition of an nth Root Rational Exponents | Chapter 6, Section 6.1, pages 496-502 Chapter 6, Section 6.2, pages 508-512 | p. 505: 9-37 odd, 59,65,67,79 p. 513: 9,13,17, 19, 25,29,33,41,45,53,65,73,81,93 |
| 5 | Feb 14 (W) 2018 | Simplifying Radical Expressions (Review) Addition and Subtraction of Radicals (Review) | Chapter 6, Section 6.3, pages 515-519 Chapter 6, Section 6.4, pages 522-525 | p. 520: 9,13,17,21,25,33,39,55,59,63,79 p. 526: 15,19,23,35,37,41,51,55,57,61,81 |
| 6 | Feb 20(Tu) 2018 Monday schedule | Multiplication of Radicals (Review) Division of Radicals and Rationalization (Review) Solving Radical Equations (Review) | Chapter 6, Section 6.5, pages 528-532 Chapter 6, Section 6.6, pages 536-543 (skip examples 4 and 6) Chapter 6, Section 6.7, pages 546-549 | p.534: 11,17,19,21,23,25,29,31,35,37,55,57 61,63,67,77,79,87 p.544: 11,13,17,21,31,35,39,53,57,63,67,71,77,81 p. 554: 13-18,25-28,41-46 |
| 7 | Feb 21 (W) 2018 | Complex Numbers | Chapter 6, Section 6.8, pages 557-563 | p. 564: 15-27 odd, 31-35 odd, 53-57 odd, 61-69 odd, 81-89 odd |
| 8 | Feb 26 (M) 2018 | Review and Exam 1 | | |
| 9 | Feb 28 (W) 2018 | Quadratic Equations (Zero Product Rule) 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 582-587 | p. 404: 21-40 all p. 589: 3-19 odd, 27-33 odd, 37-53 odd |
| 10 | Mar 5 (M) 2018 | The Quadratic Formula | Chapter 7, Section 7.2, pages 592-594,596-602 (Derive the quadratic formula) | p. 603: 9-25 odd, 49-55 odd, 69,73,77,81,85 |
| 11 | Mar 7 (W) 2018 | Applications of Quadratic Equations | Chapter 4, Section 4.8, pages 398-400 Chapter 7, Section 7.2, pages 594-595 | p. 398: 61,65,67,69,71 p. 603: 39-47 odd |
| 12 | Mar 12 (M) 2018 | Graphs of Quadratic Functions Vertex of a Parabola | Chapter 7, Section 7.4, pages 612-620 Chapter 7, Section 7.5, pages 626-630 | p. 621: 11-15 odd,19-23 odd, 29-35 odd, 45,47,51-61 odd p. 633: 17-23 odd, 29,31,37,41,43 |
| 13 | Mar 14 (W) 2018 | Distance Formula, Midpoint and Circles Perpendicular Bisector | Chapter 9, Section 9.1, pages 754-759 | p. 760: 5,9,11,13,23-31 odd, 39,41,45,61,63,65, 69,75 Supplemental Problems on Perpendicular Bisector |

| Session | Date | Topic | Chapter, Section, and Pages | Suggested Homework |
|---------|--------------------|--|---|--|
| 14 | Mar 19 (M) 2018 | Systems of Three Linear Equations in Three Variables | Chapter 3, Section 3.6, pages 283-289 | p. 290: 11-17 odd, 21, 23, 27, 35-39 odd |
| 15 | Mar 21 (W) 2018 | Nonlinear Systems of Equations in Two Variables | Chapter 9, Section 9.4, pages 784-788 | p. 790: 23-37 odd, 49 |
| 16 | Mar 26 (M) 2018 | Review and Exam 2 | | |
| 17 | Mar 28 (W) 2018 | Exponential Functions Logarithmic Functions | Chapter 8, Subsections 8.3.1, 8.3.2, 8.3.4 Chapter 8, Section 8.4, pages 690-693 and examples 8, 9. | p. 687: 9-25 odd, 43, 49 p. 699: 11-61 odd |
| 18 | Apr 9 (M) 2018 | Properties of Logarithms Exponential Equations | Chapter 8, Section 8.5, pages 704-709 Chapter 8, Section 8.7, pages 726-734 | p. 710: 17-29 odd, 45-55 odd, 63-64, 67-71, 79, 81, 91 p. 735: 39-49 odd, 55- 61 odd, 73, 75, 77 |
| 19 | Apr 16 (M) 2018 | Compound Interest (in class activity) | Chapter 8, Section 8.6, pages 712-715 (omit example 3) | p. 721: 11, 13 p. 735: 79, 87 |
| 20 | Apr 18 (W) 2018 | 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 |
| 21 | Apr 23 (M) 2018 | 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 |
| 22 | Apr 25 (W) 2018 | Angle Measure in Radians 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 |
| 23 | Apr 30 (M) 2018 | Unit Circles | Chapter 3, Section 3.3, pages 108-113 | p. 115: 29-35 odd, 37-40 all |
| 24 | May 2 (W) 2018 | 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 |
| 25 | May 7 (M) 2018 | Trigonometric Equations | Chapter 6, Section 6.3, pages 284-290 | p. 292: 13,17,21,25,31,35,43-49 odd, 79, 80 |
| 26 | May 9 (W) 2018 | Review and Exam 3 | | |
| 27 | May 14 (M) 2018 | 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 |
| 28 | May 16 (W) 2018 | Graphs of the Sine and Cosine Functions | Chapter 4, Section 4.1, pages 134-144 | p. 145: 1,2, 3, 17-29 odd, 33-39 odd |
| 29 | May 21 (M) 2018 | Review for Final | | |
| 30 | May 23 (W) 2018 | Final Examination | | |

