

Prerequisites: MATH088 or equivalent/satisfactory score on ACT/SAT or Placement Exam. This course will not count toward a major or minor in mathematics.

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COVID-19:

LSSU Safety Protocols are based on federal, state, and local guidelines and recommendations from the Centers for Disease Control (CDC). The following four pillars provide the foundation for the continued safety and wellbeing of our University and surrounding community. Please do your part to adhere to these pillars.

1. **Social Distancing:** Maintain six feet of distance from those around you when possible.
2. **Mask/Face Covering:** Wear a mask or face covering when in enclosed, public locations and/or when other social distancing measures are difficult to maintain. * *Per Michigan Executive order 2020-147 effective July 13, 2020, at 12:01 a.m., Lake Superior State University will require all individuals on campus property to wear a face covering when in any indoor space, and when outdoors and unable to consistently maintain a distance of six feet or more from individuals who are not members of their household. The requirement to wear a face covering does not apply to individuals who are giving a speech for broadcast or an audience. This means that a faculty member teaching a class does not have to wear their mask when they are speaking, but will need to wear their mask when moving among students.*
3. **Sanitization:** Wash your hands with soap and water for 20 seconds multiple times each day or use hand sanitizer of at least 60% alcohol. Sanitize your desk or workstation twice daily, high-frequency touch surfaces, and living spaces with wipes found across campus.
4. **Personal/Social Responsibility:** Actively encourage those around you to adhere to these pillars while doing so yourself. Remember, we are in this together and we all have a role to play in preventing the spread of COVID-19.

Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
	1:00-2:40	8:00-8:50	1:00-2:40	

Required Text: Intermediate Algebra, Lynn Marecek, openstax (downloadable at <https://openstax.org/details/books/intermediate-algebra>)

Course Description: Algebra for students who have not had second-level high school algebra or who need a refresher course in that level of algebra. Quadratic equations, radical and rational expressions and equations, exponential and logarithmic functions will be studied. Students who are enrolled in Math 102 are encouraged to also enroll in Math 107 concurrently.

Course Learning Outcomes: At the conclusion of Math 102 students should be able to:

1. Perform basic operations on rational algebraic expressions, simplify complex rational expressions and solve rational equations.
2. Simplify expressions containing rational exponents, evaluate radical expressions, perform basic

operations on radical expressions and solve radical equations.

3. Solve quadratic equations, inequalities and equations of quadratic form using a variety of techniques, such as completing the square, factoring and using the quadratic formula.
4. Perform algebra of functions, operations on functions and find inverse functions.
5. Graph exponential and logarithmic functions and solve exponential and logarithmic equations using properties of logarithms.

This course contributes to LSSU's Institutional Learning Outcomes by addressing:

1. **Formal Communication:** Students will develop and clearly express complex ideas in written and oral presentations.
2. **Use of Evidence:** Students will identify the need for, gather, and accurately process the appropriate type, quality and quantity of evidence to answer a complex question or solve a complex problem.
3. **Analysis and Synthesis:** Students will organize and synthesize evidence, ideas, or works of imagination to answer an open-ended question, draw a conclusion, achieve a goal, or create a substantial work of art.

Grading Method: Mastery Grading: To be considered proficient in each Course Learning Outcome a student must obtain a score of 8/10 on the unit Proficiency Test. If 8/10 is not achieved, a student may put in additional practice and retake the unit Proficiency Test to improve the score until a score of 8/10 is reached.

Proficiency Test: These tests shall be on the XYZHomework Platform. The answers will be graded as correct or incorrect. It is the *student's responsibility* to ensure that the answers are entered in such a way so that XYZ interpret the answers correctly. The system generates tests automatically. So, in repeated attempts, the tests generated may not look alike.

Grading Scale:

Five Proficiencies: A	One Proficiency: D
Four Proficiencies: B	No Proficiencies: F
Three Proficiencies: C	

Course Schedule and Homework: The homework exercises for each section covered are on the last page of this handout. You should spend a lot of your math study time doing homework. If you are struggling with your homework seek help from your instructor or the tutors in the Learning Center.

Ground Rules:

1. **Calculator:** The TI-83/84 Plus is the recommended calculator for this course. All other electronic devices, including computers, PDAs and cell phones, must be turned off for all class lecture sessions.
2. **Purpose of Lecture:** Lectures are an opportunity for students to ask questions and seek clarification on material. This implies student preparation has been accomplished prior to class. Lecture is also the opportunity for the instructor to coordinate coverage of the material and present material that is historically or potentially difficult. It does not negate student preparation or study.
3. **Attendance Policy:** Attendance is strongly encouraged. If you miss a class, or are late, you are still responsible for class notes and assignments.
4. **Academic Integrity:** Students are expected to perform all assigned work themselves. Any form of cheating or plagiarism will be handled in accordance with the Academic Integrity Procedures. Violations of the

University Academic Integrity Policy may result in an F course grade.

- 5. Testing:** During your exams, you are allowed to have only blank paper, pencil and your calculators available. No books, notes, etc. are allowed. Use of other electronic devices during exams is prohibited.

University Policies and Statements:

Americans with Disabilities Act & Accommodations

Lake Superior State University is committed to following the requirements of the Americans with Disabilities Act Amendments Act and Section 504 of the Rehabilitation Act. The University is also dedicated to providing equal opportunity for participation in all programs, services and activities. If you are a student with a disability or think you may have a disability, please contact Accessibility Services, KJS Library #233, (906) 635-2355, accessibility@lssu.edu, to discuss your request further. Once registered with Accessibility Services, students should contact their instructor as early as possible for assistance with classroom accommodations.

Academic Success Center

To support you on your academic path, the Academic Success Center (ASC) is free for all students and is located on the main floor of the library. The ASC offers walk in sessions for the math center, consultations with the writing center and tutoring sessions by appointment. In addition, many classes offer supplemental instruction, which are group sessions tailored to your course content. Contact the Academic Success Center at academicsuccess@lssu.edu to set up an appointment.

IPASS (Individual Plan for Academic Student Success)

The IPASS program assists students in developing an Individualized Plan for Academic Success. Students can initiate contact with IPASS on their own, or may be directed to do so by their advisor, by an instructor, by the Scholastic Standards / Financial Appeals Committees, or by the Provost's Office. If at mid-term your grades reflect that you are at risk for failing some or all of your classes, you will be contacted by a representative of IPASS. The IPASS program is designed to help you gain control over your learning through pro-active communication and goal-setting, through the development of intentional learning skills and study habits, and through personal accountability. You may email lakersuccess@lssu.edu if you would like to sign up early in the semester or if you have any questions or concerns.

Add/Drop Policy

Courses can be added or dropped through Anchor Access until the sixth day of the semester. After this date, students need the instructor's permission to add a course. For additional details about add/drop or withdrawal, go to <https://www.lssu.edu/registrar/scheduling/adddrop-courses-withdrawal-information/>

Tentative course outline (We might be off by a section or two)

Week	Dates	Monday	Wednesday	Friday
1	08/10	7.1	7.2	7.2
2	08/17	7.3	7.4	7.4
3	08/24	7.5	7.6	7.6
4	08/31	8.1	8.2	8.2
5	09/07	8.3	8.4	8.4
6	09/14	8.5	8.6	8.6
7	09/21	8.7	8.8	8.8
8	09/28	9.1	9.2	9.2
9	10/05	9.3	9.4	9.4

College of Innovations and Solutions
MATH 102 Intermediate Algebra (3,0)

Fall 2020
3 Credit

10	10/12	9.5	9.6	9.6
11	10/19	9.7	9.8	9.8
12	10/26	10.1	10.2	10.2
13	11/02	10.3	10.4	10.4
14	11/09	10.5	Review	Review

Assigned Homework Problems (Do as many as possible to practice before attempting the exams)

Section	TRY IT	Exercises
7.1	All	2b, 3c, 4c, 6, 8, 10, 12, 16, 19, 24, 32, 34, 40, 44, 46, 50, 52, 62, 64, 68
7.2	All	76, 80, 84, 88, 90, 92, 98, 100, 102, 108, 110, 112, 116, 124, 126, 136, 146
7.3	All	152, 154, 160, 162, 164, 172, 174, 176, 178, 180, 184
7.4	All	198, 200, 202, 206, 208, 210, 212, 214, 216, 218, 220, 222, 226, 228, 238, 242
7.5	All	254, 258, 260, 262, 264, 266, 268, 269, 274, 278, 282, 286, 292, 302, 306, 308, 310, 314, 317, 321, 324, 326
7.6	All	342, 344, 348, 354, 356, 362, 364, 366, 368, 370
8.1	All	2, 4, 6, 8, 10, 12, 14, 20, 22, 24, 28, 30, 32, 34, 38, 40, 42, 44, 46, 48
8.2	All	56, 58, 60, 62, 63, 65, 68, 70, 72, 74, 78, 82, 84, 86, 88, 90, 92, 96, 98, 100, 104, 106, 108, 112
8.3	All	120, 122, 124, 126, 130, 132, 136, 138, 142, 144, 146, 148, 152, 154, 156, 160, 162
8.4	All	166, 168, 170, 172, 174, 184, 186, 188, 190, 192, 194, 198, 200, 204, 206
8.5	All	246, 248, 250, 254, 256, 260, 262, 266, 268, 270, 272, 274, 278, 280
8.6	All	288, 290, 292, 294, 300, 304, 306, 310, 312, 324, 326, 330, 332, 334, 338
8.7	All	352, 354, 356, 358, 362, 368, 370, 374, 376, 380, 384, 392, 396, 402
8.8	All	410, 412, 414, 416, 418, 420, 426, 428, 430, 434, 436, 446, 448, 458, 462, 464, 468, 470, 474, 476
9.1	All	2, 4, 8, 10, 14, 18, 20, 24, 28, 34, 38, 42, 46
9.2	All	72, 74, 76, 78, 82, 88, 90, 96, 98, 100, 104, 106, 108
9.3	All	114, 116, 120, 122, 124, 128, 132, 134, 136, 138, 142, 144, 146, 148
9.4	All	156, 158, 162, 164, 168, 170, 172, 176, 178, 180, 186, 190, 192
9.5	All	196, 200, 202, 204, 206, 214, 216, 220, 224, 226
9.6	All	234, 236, 238, 240, 242, 246, 248, 250, 254, 256, 258, 262, 264, 266
9.7	All	330, 332, 334, 336, 338, 346, 348, 349-356, 358, 360
9.8	All	364, 366, 268, 372, 374, 376, 378, 382, 384, 386
10.1	All	2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 28, 30, 32, 36, 38, 40, 44, 46, 50, 52, 54, 56, 58
10.2	All	66, 72, 78, 84, 86, 90, 94, 96, 98, 100, 102, 104, 106, 108, 116, 118, 120
10.3	All	All Even Ones
10.4	All	All Even Ones
10.5	All	All Even Ones