Weekly Course Plan


*Reading:* R2 (p.7-8), R3 (p.17-22, 24-25), R4 (p.31-35).

**Week 2 (September 2-6, no classes 9/2 and 9/3)** Number line. Intervals. Absolute value of a real number.

*Reading:* R2 (p.10-12), R3 (p.16-17).


*Reading:* 1.1 (p.44-53), 1.6 (p.83-101), 1.4 (p.76-80).

**Week 4 (September 16-20)** Text problems leading to linear equations (How to translate a text into a mathematical language, how to introduce a variable, how to interpret algebraic expressions involved into solution, how to analyze the answer, how to solve a problem in different ways.)

*Reading:* 1.2-1.3 (p.57-72).

**Week 5 (September 23-27)** Rectangular coordinate system (a reminder). Linear equations in two variables. Graph of a linear equation. Lines on a plane. Intercepts, slope, vertical and horizontal lines.

*Reading:* 2.1 (p.128-137).

**Week 6 (September 30-October 4)** *in-class Exam 1 on the first class this week*

Different forms of a linear equation: standard, intercept, slope-intercept, point-slope form, two-points form. Parallel and perpendicular lines.

*Reading:* 2.2-2.3 (p.145-152, 157-165).


*Reading:* 3.1-3.3 (p.236-240, 246-250, 253-257), 3.5 (p.270-276), 1.7 (p. 103-110).

**Week 8 (October 14-18)** Notion of a function and its graph. Domain of a function. Linear functions.

*Reading:* 2.6-2.7 (p.192-198, 204-205).
Week 9 (October 21-25) Integer exponents and operations on them. Radicals. Exponential notation for radicals.

Reading: 4.1 (p.320-326), 6.1 (p.496-504).

Week 10 (October 28-November 1) Oct. 31 8:45pm-10:15pm Exam 2
Quadratic polynomials and quadratic equations. Quadratic formula. Factoring quadratic polynomials.

Reading: Supplement Quadratic Equations and Parabolas.

Week 11 (November 4-8) Quadratic functions and their graphs. Vertex, axis of symmetry, intercepts of a parabola.

Reading: Supplement Quadratic Equations and Parabolas.

Week 12 (November 11-15) Polynomials in one variable and operations on them. Polynomial in several variables. Factoring polynomials.

Reading: 4.2-4.3 (p.329-334, 340-344), 4.7 (p.382-388).

Week 13 (November 18-22) Rational expressions and operations on them.

Reading: 5.1 (p. 422-428), 5.3-5.5(p.437-444, 447-451, 454-460).


Monday, December 2 is the last day of classes.

December 10 2:15pm-5:00pm Exam 3