

MATH 140 Exam I (1.1 - 2.3) Review

1. Know the properties of the real numbers and how to perform algebraic operations involving them.
2. Know how to graph intervals on the real line.
3. Know the definition of set and the *union* and *intersection* of sets.
4. Know how to evaluate the absolute value of a number and distance between two points on the real line.
5. Know the laws of exponents and how to simplify expressions involving exponents.
6. Know how to express numbers using scientific notation and how to multiply/divide numbers expressed in scientific notation.
7. Know how to evaluate and simplify expressions involving rational exponents and radicals.
8. Know how to find the sum, difference, product and quotient of algebraic expressions.
9. Know how to factor algebraic expressions including trinomials.
10. Know how to find the sum, difference, product and quotient of rational expressions.
11. Know how to solve basic equations and to form and solve basic models.
12. Know how to solve quadratic equations by: (a) factoring, (b) completing the square, and by the (c) quadratic formula.

Example exercises: Quiz & Homework questions;

Ch. 1 Review, #1-93 odd;

Ch. 1 Test;

Ch. 2 Review, #1-16, 25, 26