

Intermediate Algebra Chapter 1 Test Topics

From the text:

- Sections 1.2, 1.3, 1.4.

From the Website:

- Chapter 1 Summary
 - Definitions
 - Every last one of them
 - Letter perfect
 - Your own words will not suffice
 - Symbols
 - See Special Topics:
http://www.drdelmath.com/special_topics/symbols.htm
 - Formulas
 - State them
 - Use them
 - Derive some from others or basic facts
 - Examples
 - Examples of objects, operations, relations, and processes
 - Explanations
 - Be able to explain every step in a process.
 - In Mathematics to explain means to reference a general mathematical fact which justifies the particular process in question. (Deductive Reasoning)
 - Topics in the links
- Special Topic: Introduction to sets
- Special Topic: Sets of Numbers
 - Natural
 - Whole
 - Integer
 - Rational
 - Irrational
 - Real
 - Intervals
 - Rays
 - Roster method
 - Set builder method
 - Interval notation
 - Representation on the Real Number Line

Detail Listing:

- Sets of Numbers and their relationships to each other as described, defined, and pictured in the text and on the website.
- Roster method, set builder notation, and interval notation to represent sets.
- Use of the Real Number Line to represent The Real Numbers, to illustrate addition and subtraction, and to graph intervals and rays. Representation of equal, less than, and greater than on Real Number Line.
- The concepts of set, element of a set, the null set, subset, union of sets, intersection of sets, and Venn diagrams.
- Unary Operations, Binary Operations, Binary Relations
- Operations on the real numbers.
- Order of operations and grouping symbols.
- Operations on fractions.
- Algebraic expression, terms, like terms, sum of terms, difference of terms, product of terms, quotient of like terms.
- Construct a Mathematical Model.
- Use formulas.
- Definition (algebra ready) of Absolute Value.

Four Very Important Properties:

Know the statement of each of these properties and be able to use them.

- The Distributive Property
- The Transitive Property
- The Zero Factor Property
- The Law of Trichotomy

Items I overlooked:

Items from the course (text, handouts, website, lecture) which I may have overlooked while preparing this guide document.