Chapter 1 Review Questions

Studying for a chapter examination is a personal process, one which nobody else can do for you. Simply take the time to review what you have done. Here are the new terms in Chapter 1.

Addition law of exponents [1.3]
Axiom [1.2]
Base [1.3]
Billion [1.3]
Conclusion [1.2]
Conjecture [1.2]
Counting number [1.2]
Cube [1.2]
Decimal notation [1.3]
Deductive reasoning [1.2]
Distributive laws of exponents [1.3]
Estimate [1.3]
Exponent [1.3]
Exponential [1.3]
Exponential notation [1.3]
Exponentiation [1.2]
Extended order of operations [1.3]
Euler circle [1.2]
Fixed-point form [1.3]
Floating-point form [1.3]
Googol [1.3]
Inductive reasoning [1.2]
Invalid argument [1.2]
Laws of exponents [1.3]
Million [1.3]
Multiplication law of exponents [1.3]
Natural number [1.2]
Order of operations [1.2]
Pascal's triangle [1.1]
Power [1.3]
Premise [1.2]
Problem-solving procedure [1.1]
Scientific notation [1.3]
Square [1.2]
Street problem [1.1]
Subtraction law of exponents [1.3]
Syllogism [1.2]
Theorem [1.2]
Trillion [1.3]
Undefined term [1.2]
Valid argument [1.2]

If you can describe the term, read on to the next one; if you cannot, then look it up in the text (the section number is shown in brackets). Next, review the types of problems in Chapter 1.

TYPES OF PROBLEMS

Use Pólya's method to solve a problem. [1.1]
Use Pascal's triangle as an aid to problem solving. [1.1]
Answer questions by using inductive reasoning. [1.2]
Simplify an expression using the order of operations. [1.2, 1.3]
Distinguish inductive from deductive reasoning. [1.2]
Use Euler circles to determine the validity of a syllogism [1.2]
Write out exponential numbers without using exponents. [1.3]
Write a large or small number in scientific notation. [1.3]
Use a calculator to answer numerical questions. [1.3]
Estimate answers to numerical questions. [1.3]
Simplify numerical problems by using the laws of exponents. [1.3]
Describe the relative sizes of large and small numbers. [1.3]

Once again, see if you can verbalize (to yourself) how to do each of the listed types of problems.

Work all of Chapter 1 Review Questions (whether they are assigned or not). Work through all of the problems before looking at the answers, and *then* correct each of the problems. The entire solution is shown in the answer section at the back of the text. If you worked the problem correctly, move on to the next problem, but if you did not work it correctly (or you did not know what to do), look back in the chapter to study the procedure, or ask your instructor.

Finally, go back over the homework problems you have been assigned. If you worked a problem correctly, move on to the next problem, but if you missed it on your homework, then you should look back in the book or talk to your instructor about how to work the problem.

If you follow these steps, you should be successful with your review of this chapter.