# Chapter 4 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 4.

Addition principle [4.1]
Artificial intelligence [4.5]
ASCII code [4.4]
Base *b* [4.3]
Binary [4.3, 4.4]
Bit [4.4]
Bulletin board [4.5]
Byte [4.4]
Chat rooms [4.5]
Communications package [4.5]
Computer abuse [4.5]
Computer program [4.5]
Counting number [4.1]
Data processing [4.5]
Database management [4.5]
Decimal system [4.2]
Decimal point [4.2]
Download [4.5]
e-mail [4.5]
Expanded notation [4.2]
Hard drive [4.5]
Hardware [4.5]
Hexadecimal [4.3]
Hindu-Arabic numerals [4.2]
Hundred [4.2]
Information retrieval [4.5]
Input device [4.5]
Internet [4.5]
Keyboard [4.5]
Laptop [4.5]
Minicomputers [4.5]
Modem [4.5]
Monitor [4.5]
Mouse [4.5]
Multiplication principle [4.1]
Network [4.5]
Number [4.1]
Numeral [4.1]
Numeration system [4.1]
Octal numeration system [4.3]
Online [4.5]
Output device [4.5]
Password [4.5]
Pattern recognition [4.5]
Peripheral [4.5]
Personal computer [4.5]
Pixel [4.5]
Positional system [4.1]
Printer [4.5]
Program [4.5]
RAM [4.5]
Repetitive system [4.1]
Resolution [4.5]
ROM [4.5]
Simple grouping system [4.1]
Simulation [4.5]
Software [4.5]
Software package [4.5]
Spreadsheet [4.5]
Subtraction principle [4.1]
Supercomputer [4.5]
Ten [4.2]
Upload [4.5]
Word processing [4.5]
World Wide Web [4.5]

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 4.

# TYPES OF PROBLEMS

Know the principal properties, advantages and disadvantages of the Egyptian, Babylonian, and Roman numeration systems. [4.1]
Write decimal numerals for numbers written in the Egyptian, Babylonian, and Roman numerations systems. [4.1]
Write decimal numerals in the Egyptian, Babylonian, and Roman numeration systems. [4.1]
Perform addition and subtraction in the Egyptian and Babylonian numeration systems. [4.1]

Give the meaning of a particular numeral in the Hindu-Arabic numeration system. [4.2]
Write the decimal representation for a number written in expanded notation. [4.2]
Write a decimal numeral in expanded notation. [4.2]
Use an abacus to illustrate the meaning of a decimal number. [4.2]

Count objects in various number bases. [4.3]
Write numbers in various bases in expanded notation. [4.3]
Change numbers from base *b* to base 10. [4.3]
Change numbers from base 10 to base *b*. [4.3]
Solve applied problems by using number bases. [4.3]

Change a binary numeral to a decimal numeral. [4.4]
Use the binary numeration system to represent a number. [4.4]
Use the binary numeration system and the ASCII code to represent a word. [4.4]
Add, subtract, and multiply using binary numeration systems. [4.4]
Convert from binary to octal and from octal to binary numeration systems. [4.4]

Know some principal events in the history of computers. [4.5]
Know some principal events in the history of the Internet. [4.5]
Know the principal uses for a computer. [4.5]
Know the principal computer abuses. [4.5]

Once again, see if you can verbalize (to yourself) how to do each of the listed types of problems. Work all of Chapter 4 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 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.