

**6C: Reading/Writing Math Symbols**

For use after Lesson 6-3

**Study Skill** When you write symbols in your notes that may be easily confused, make sure you write them clearly so you will not confuse yourself when you review your notes.

**A single mathematical expression, such as  $-1$ , may have several meanings that are slightly different in various contexts. Answer the following questions about the various meanings of the expression  $-1$ .**

1. The basic meaning of  $-1$  in the expression  $7 - 1$  is to \_\_\_\_\_ the number one from seven.
2. In another meaning,  $-1$  is the additive \_\_\_\_\_ of 1.
3. A number and its additive inverse add to a value of \_\_\_\_\_.
4. When  $-1$  is used as an exponent on an integer, such as  $8^{-1}$ , it denotes the multiplicative \_\_\_\_\_ of 8, or the fraction \_\_\_\_\_.
5. The product of a number and its multiplicative inverse is \_\_\_\_\_.
6. When  $-1$  is used as an exponent on a matrix, such as  $A^{-1}$ , then the exponent means the multiplicative \_\_\_\_\_ of the matrix  $A$ .
7. The product of the two matrices,  $A$  and  $A^{-1}$ , is  $I$ , which is the \_\_\_\_\_ matrix.

Later on you will see how  $-1$  is also used as an exponent to mean the inverse of a function and also to mean the inverse of a trigonometric function. Watch for these uses, and compare their meanings to the ones you have explored here.