Part IV: C Level

This equation, assuming that everything is a numeric variable, is correct. The following statement, however, is a boo-boo:

breakfast+lunch+dinner=meals;

The math goes on the right side of the equal sign. Always.

- ✓ Goofing up a math equation is where you get those horrid Lvalue errors.
- ✓ You can always remember the cryptic mathematical symbols in the C language by looking at your keyboard's numeric keypad; each of the symbols is right there.
- Math problems in C work from left to right, the way you read. Some operations, however, have priority over others. If you forget, remember My Dear Aunt Sally, from Chapter 11.
- ✓ Another mathematical symbol is the %, which means *modulus*. This dreadful topic is covered in Chapter 26, where it's appropriate uses are apparent.
- It can be said that a C language operator exists for every odd symbol, shape, jot, and tittle on your keyboard. This statement is *almost* true. Pray that you never have to memorize them all.

Taking your math problems to a higher power

Two mathematical operations that seem to be lacking in C's granola of symbols are the power-of symbol and the square root symbol. Of course, I'm assuming that you give a hoot about either of them, but you never know when they may crop up.

The power-of thing deals with problems that contain the words *squared* and *cubed* in addition to *power of*. For example:

"Four squared" means $4\times 4,$ or 42. The latter reads "Four to the second power."

"Four cubed" means $4 \times 4 \times 4$, or 43. This one reads "Four to the third power."

Beyond cubed, or to the third power, you just say the power number; So, $4 \times 4 \times 4 \times 4 \times 4 \times 4$ is 45, or "four to the fifth power." (Don't even bother trying to figure out the answer; the computer does it for you!)



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