## Why the multiplication symbol is an asterisk (if you care to know)

In school, you probably learned that the X symbol means *multiply.* More properly, it's the × symbol, not the character X (or even little x). It's pronounced "times," as in "four times nine" for 4×9. In higher math, where it was harder for you to get an "easy A," the dot was also used for multiplication: 4•9 for "four times nine." I have even seen that expressed as 4(9) or (4)(9), though I fell right back asleep.

Why can't computers use the X? Primarily because they're stupid. The computer doesn't

know when you mean X as in "ecks" and × as in "times." So, the asterisk (*) was accepted as a substitute. (The keyboard has no dot• character either.)

Using the * for multiplication takes some getting used to. The slash is kind of common — 3/$1 for "three for a dollar" or 33 cents each — so that's not a problem. But the * takes some chanting and bead counting.

It just doesn't work in the C language. The preceding line tells the C compiler to take the value of the var variable and put it into some numbers. Huh? And that's the kind of error you see when you try it: Huh? (It's called an Lvalue error, and it's shamefully popular.)

- More mathematical symbols, or operators, are used in C programming. This chapter introduces only the four most common symbols.

- Having trouble remembering the math operators? Look at your keyboard's numeric keypad! The slash, asterisk, minus, and plus symbols are right there, cornering the number keys.

- Unlike in the real world, you have to keep in mind that the calculation is always done on the *right,* with the answer squirted out the equal sign to the left.

- You don't always have to work with two values in your mathematical functions. You can work with a variable and a value, two variables, functions — lots of things. C is flexible, but at this stage it's just important to remember that * means "multiply."

## How much longer do you have to live to break the Methuselah record?

The following METHUS4.C source code uses a bit of math to figure out how many more years you have to live before you can hold the unofficial title of the oldest human ever to live (or at least tie with him).