

To count backward, you subtract 1 from a variable's value, which is exactly the way you do it in your head: 10, 9, 8, 7, and so on. It looks identical to the incrementing statement, except for the minus sign:

```
b=b-1;
```

The value of variable *b* is 1 less than it was before. If *b* came in with a value of 5, this statement sets *b*'s value to 4. This process is known as *decrementing* a variable's value.

- ✓ Decrementing, or subtracting 1 (or any number) from a variable's value is just common subtraction. The only big deal here is that decrementing is done in a loop, which makes the loop count backward.
- ✓ Incrementing means adding (1) to a variable's value.
- ✓ Decrementing means subtracting (1) from a variable's value.
- ✓ Decrementing works because C first figures out what's on the right side of the equal sign:

```
b=b-1;
```

First comes *b-1*, so the computer subtracts 1 from the value of variable *b*. Then, that value is slid through the equal signs, back into the variable *b*. The variable is decremented.

## *How counting backward fits into the for loop*

Take another look at Line 7 from the OLLYOLLY.C program:

```
for(count=10;count>0;count=count-1)
```

It's basic *for* loop stuff. The loop has a starting place, a while-true condition, and a do-this thing. The parts are listed in Table 16-1.

<b>Table 16-1</b>		<b>How the <i>for</i> Loop Counts Backward</b>	
<i>Loop Part</i>		<i>Condition</i>	
Starting		count=10	
While-true		count>0	
Do-this		count=count-1	