Suppose that `big` is a big number in this statement:

```
m = blah % 5;
```

The values of variable `m` are in the range of `0` through `4`, depending on the remainder of `big` divided by `5`.

The values of variable `m` for the following statement are either `0` or `1`, depending on whether `oddoreven` is even or odd, respectively:

```
m = oddereven % 2;
```

For example, a die has six sides. Suppose that the computer coughs up the random value `23,415`. To pare it to a multiple of 6, you use this line:

```
dice1=23415 % 6;
```

The computer calculates how many times 6 gazinta 23,415. It then places the remainder in the `dice1` variable. (The result is the number `3`, which is a more realistic roll of a die than `23,415`.)

- If the second value is *larger* than the first, as in `5 % 10`, the result is always equal to the second value. Therefore, you want the larger value to come first in a modulus operation.
- The modulus operator is `%`, the percent sign. Pronounce it "mod."
- No math! The modulus is used to help you pare your random numbers. That's all! You can dwell on the mathematical aspects of the `%` in other C language books.
- *Gazinta* means "goes into." I point it out here because my managing editor loathes it when I use nondictionary words.

- If you want to pare a large random number as a roll of the dice, you need this equation:

  ```
  dice1=(random_value % 6)+1;
  ```

  The *`random_value`* the computer produces must be pared via `% 6` (mod 6). It produces a number in the range of `0` to `5` (0 to 5 as a remainder — you can't have a remainder of 6 when you divide by 6.) After the `%` calculation, you add 1 to the number and get a value in the range of `1` to `6`, which are the true numbers on any given side of a die.
- In the My Dear Aunt Sally theme of things, a modulus operation comes just after division and before addition. See the nearby Technical Stuff sidebar, "Introducing My Dear Mother's Aunt Sally (Ugh!)."
- "Ah, yes, Dr. Modulus. I'm familiar with your work in astrogenetics. Is it true that you got kicked out of the academy for engineering a third gender in mice?" "You read too much, lad."