NOTATION AND NUMERATION OF LARGE NUMBERS

To make it easy to read large numbers, the digits in which they are written are separated into groups with three digits in each, beginning at the *right.* Each group is called a **period** and is usually separated from the other periods by the use of the comma. Each period has a name. From the right the first period is **units,** the second **thousands,** the third **millions.** In *each period* the first digit from the right is *units,* the second *tens,* and the third *hundreds.* Each digit has, therefore, two values—its own, or its *intrinsic* value, and its *local* value, which is given to it by the *place* it occupies. For example, in 964 the intrinsic value of 9 is nine, but, as it occupies the third place from the right, its *local* value is 9 *hundred.*

Study the following table:

Periods	billions	millions	thousands	hundreds
Places	hundred billions ten billions billions	hundred millions ten millions millions	hundred thousands ten thousands thousands	hundreds tens units
	6 8 2,	9 7 5,	3 2 9,	6 4 7.

The number is 682 billion 975 million 329 thousand 647.

What is the *local* value of 975? of 64? of 8? of 753? of 7532? of 8297?