

Basically, there are three simple steps to reading large numbers.

1) The first step is reading small numbers.

5 five

50 fifty

500 five hundred

5000 five **thousand**

If we can read the numbers above, we can read any number from 0 (zero) to 1,000,000,000 (one billion).

2) The second step is understanding how the brain recognizes small groups.

How many circles are below?

○ ○ ○

We do not have to spend time counting each item one-by-one to recognize that there are three. Usually, the brain can immediately recognize groups of one, two, three, and four without counting one-by-one. As group sizes increase to five, six, or more, this immediate recognition becomes more difficult. We start counting one-by-one.

How many circles are here? ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ Do you have to count each one?

How many circles are below?

○ ○ ○ ○ ○ ○

Again, it is easy to recognize that there are six without counting one-by-one. There are two groups of three, which makes six.

How many circles are below?

○ ○ ○ ○ ○ ○ ○ ○ ○

Three groups of three makes 9. We do not need to count the circles one-by-one. Grouping is very important.

BIG Numbers in English

②

3) The third step is understanding the names of large numbers. Let's look at thousand, million and billion. In English numbers, we group every three digits, from right to left.

^{thousand}
_,000 ← three zeroes is "thousand" (1,000 = one thousand)

^{million}
_,000,000 ← six zeroes is "million" (1,000,000 = one million)

^{billion}
_,000,000,000 ← nine zeroes is "billion" (1,000,000,000 = one billion)

^{0 0 0}
THOUSAND (three zeros)

7 = seven; ^{thousand}
7,000 = seven thousand

17 = seventeen; ^{thousand}
17,000 = seventeen thousand

27 = twenty-seven; ^{thousand}
27,000 = twenty-seven thousand

77 = seventy-seven; ^{thousand}
77,000 = seventy-seven thousand

747 = seven hundred forty-seven;

747,000 = seven hundred forty-seven **thousand**;

123 = one hundred twenty-three

^{0 0 0} ^{0 0 0}
747,123 = seven hundred forty-seven **thousand**, one hundred twenty-three

^{0 0 0 0 0 0}
MILLION (six zeros)

^{million}
8,000,000 = eight **million**.

^{million}
85,000,000 = eighty-five **million**

^{million}
857,000,000 = eight hundred fifty-seven **million**

^{0 0 0 0 0 0} ^{million} ^{thousand}
857,569,274 = 857,000,000 (+) 569,000 (+) 274 **OR**

Eight hundred fifty-seven ^{0 0 0 0 0 0} **million**, five hundred sixty-nine ^{0 0 0} **thousand**, two hundred seventy-four

BIG Numbers in English

③

000 000 000
BILLION (nine zeros)

953,000,000,000 = nine hundred fifty-three billion

Can you write the numbers below?

953,656,254,566

78,000,000,000

78,256,289,365

2,365,785,333

468,379,654,168

Now let's practice a few more.

A) 236,544 =

B) 95,634 =

C) 45,436,898 =

D) 2,686,954,523 =

E) 135,846,325 =

F) 489,678,664,854 =

G) 5,365,485 =

H) 76,684,456,816 =