

Name of Large Numbers

From Ask Dr. Math <http://mathforum.com/dr.math/>

million 10^6

billion 10^9

trillion 10^{12}

quadrillion

quintillion

sextillion

septillion

octillion

nonillion

decillion

undecillion

dodecillion,

tredecillion

quattuordecillion

quindecillion

sexdecillion

septendecillion

octodecillion

novemdecillion

vigintillion

unvigintillion

dovigintillion

trevigintillion

quattuorvigintillion

quinvigintillion

sexvigintillion

septenvigintillion

octovigintillion

novemvigintillion

trigintillion

untrigintillion

dotrigintillion

tretrigintillion

quattuortrigintillion

quintrigintillion

sextrigintillion

septentrigintillion

octotrigintillion

novemtrigintillion

You may also want to know about one googol, which is 1 followed by 100 zeros, or ten dotrigintillion.

NOTE:

A googolplex is 1 followed by a googol zeros. There are not enough elementary particles in the known universe to write down a googolplex. (There are fewer than a trīgintillion such particles, but we need to make ten dotrīgintillion one digits.)

But it also depends on whether you are using the U.S. or the British system. In the U.S., octillion, nonillion, decillion, undecillion, dodecillion, tredecillion, quattuordecillion, quindecillion, sexdecillion, septendecillion, octodecillion, novemdecillion, take you into the 21st period (10^{60}). I found vigintillion as the next one (10^{63}) and the largest I could find was centillion (10^{303}). I imagine there is something like milletillion (10^{3003}) as well (1000 tillion). I looked it up - centillion in the British system is 10^{600} (but they have thousand million instead of billion, etc).

By the way, the power of ten is also the number of places (or zeros) following the lead digit.

After vigintillion come unvigintillion, dovigintillion, and so on. After novemvigintillion comes trīgintillion, which is followed by untrīgintillion through novemtrīgintillion.

One googol = 10^{100} ; this is ten dotrīgintillion in America or ten thousand sexdecillion in Britain.