Ever Heard of a Prillionaire?
by Carol Castellon

Do you watch the TV show “Who Wants to Be a Millionaire?” hosted by Regis Philbin? Have you ever wished for a million dollars? "In today’s economy, even the millionaire doesn’t receive as much attention as the billionaire. Winners of a one-million dollar lottery find that it may not mean getting to retire, since the million is spread over 20 years (less than $3000 per month after taxes)."[1]

"If you count to a trillion dollars one by one at a dollar a second, you will need 31,710 years. Our government spends over three billion per day. At that rate, Washington is going through a trillion dollars in a less than one year. . or about 31,708 years faster than you can count all that money!"[1]

I’ve heard people use names such as “zillion,” “gazillion,” “prillion,” for large numbers, and more recently I hear “Mega-Million.” It is fairly obvious that most people don’t know the correct names for large numbers.

But where do we go from million? After a billion, of course, is trillion. Then comes quadrillion, quintrillion, sextillion, septillion, octillion, nonillion, and decillion. One of my favorite challenges is to have my math class continue to count by "illions" as far as they can.

million		$= 1x10^{6}$
billion		$= 1x10^{9}$
trillion		$= 1x10^{12}$
quadrillion		$= 1x10^{15}$
quintillion		$= 1x10^{18}$
sextillion		$= 1x10^{21}$
septillion		$= 1x10^{24}$
octillion		$= 1x10^{27}$
nonillion		$= 1x10^{30}$
decillion		$= 1x10^{33}$
undecillion		$= 1x10^{36}$
duodecillion		$= 1x10^{39}$
tredecillion		$= 1x10^{42}$
quattuordecillion		$= 1x10^{45}$
quindecillion		$= 1x10^{48}$
sexdecillion		$= 1x10^{51}$
septemdecillion		$= 1x10^{54}$
octodecillion		$= 1x10^{57}$
novemdecillion		$= 1x10^{60}$
vigintillion		$= 1x10^{63}$
unvigintillion	(or vigintunillion)	$= 1x10^{66}$
duovigintillion	(or vigintiduoillion)	$= 1x10^{69}$
trevigintillion	(or vigintitrillion)	$= 1x10^{72}$
quattuorvigintillion	(or vigintiquadrillion)	$= 1x10^{75}$
quinvigintillion	(or vigintiquintrillion)	$= 1x10^{78}$

sexvigintillion	(or vigintisextillion)	$= 1x10^{81}$
septvigintillion	(or vigintiseptillion)	$= 1x10^{84}$
octovigintillion	(or vigintoctillion)	$= 1x10^{87}$
nonvigintillion	(or vigintinonillion)	$= 1x10^{90}$
trigintillion		$= 1x10^{93}$
untrigintillion		$= 1x10^{96}$
duotrigintillion		$= 1x10^{99}$
ten-duotrigintillion = googol		$= 1x10^{100}$
.		
.		
skewer's number		$= 1x10^{130}$
.		
.		
centillion		$= 1x10^{303}$
.		
.		
googolplex		$= 1x10^{10^{100}}$

There are no names given to the numbers between googol, skewer's number, centillion, and googolplex. And, there is apparently no Global agreement on naming large numbers.

According to many books (such as Mathematics, A human Endeavor by Harold Jacobs)[2] the googol is one of the largest numbers ever named. The googolplex is 1 followed by a googol zeros. More recently, Skewer's number is the largest number ever used in a mathematical proof. (Let's hope we never hear about the National Debt in terms of Skewer's number!) The centillion is 100 groups of 3 zeros beyond 1000, which follows the American convention of naming numbers.

Webster's Dictionary differentiates between American and English systems of numeration. Our list above follows American convention. Until World War I, there was not much need for number names beyond millions, because large numbers could be expressed in powers of ten, without referring to any names. This explains why a billion is 1,000,000,000 in the United States, while in England it is 1,000,000,000,000. Americans (apparently influenced by the French) gave the billion as 10^9 in our earliest native American arithmetic book in 1729. Our convention names numbers by periods (groups of 3 zeros) beyond 1000. Names for large numbers were the fashion in early days, often asking students to count to duodecillion before taking up addition.[3] Hmm . . . I wonder if today's students can do this?

1. Chicago Tribune Sunday Magazine, date unknown
2. Mathematics, A Human Endeavor by Harold Jacobs (Freeman, 1970)
3. History of Mathematics by D.E. Smith (Dover, 1958)
4. "Number Sense" by Robert N. Ronau, The Mathematics Teacher (Sept. 1988)