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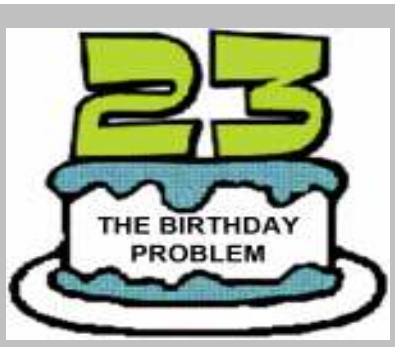
Weekly Newsletter, Vol. I, Issue 20
January 18 – 22, 2010



How many people do you need to have at a party for there to be a better than even chance that two guests share the same birthday?

The easiest way to answer it is to ask the opposite question: What is the probability that NO two people (p) have the same birthday?

In **column B**, we divide the possible number of available days (365 – p + 1) by 365.

In **column C**, we convert these answers into percentages. We see the chance of no shared birthdays (for a *specific* person, mind you) decreasing.

In **column D**, we calculate the chance that no two people (*any two*) are the same. This is called a factorial – multiplying successively (in this case, the %s in Column C: 1.00x.997x.995…etc.) to take into account all the preceding possibilities as well as the new one.

We see that with the 23rd person, there is a 49.3% chance that no two share the same birthday…or a 50.7% chance that they do!

With 57 people there is a 99% chance that 2 are the same. After that, it's not until you have 366 guests that the 99% jumps to 100%!

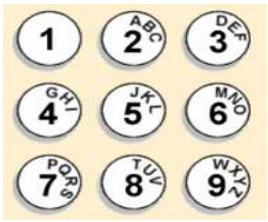
WANT MORE???

Google the "Two Envelopes Paradox" and "The Monty Hall Problem." Good luck!

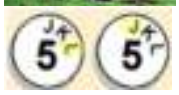
A	B	C	D
# of people	"NO" chance fraction	"NO" chance percent	"NO" chance factorial
1	365/365	100	1.00
2	364/365	99.7	.997
3	363/365	99.5	.992
4	362/365	99.2	.984
5	361/365	98.9	.973
6	360/365	98.6	.959
7	359/365	98.4	.944
8	358/365	98.1	.926
9	357/365	97.8	.906
10	356/365	97.5	.883
11	355/365	97.3	.859
20	346/365	94.8	.588
21	345/365	94.5	.556
22	344/365	94.2	.524
23	343/365	94.0	.493
(57)	309/365	93.7	.010
(183)	183/365	50.1	--
(366)	0/365	0	--

It's actually pretty easy to MEMORIZE this solution. Notice in Column C: Following a decrease of .3 from 100 to 99.7 then a .2 decrease from line 2 to line 3, a descending pattern of .3/.3/.3/.2 begins. You should be able to calculate the factorial % in Column D as you go!

What do Johan Santana, George "The Iceman" Gervin, and Lee Roy Jordan all have in common?



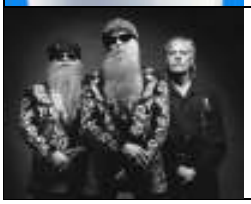


They're initials are encoded in their jersey numbers alphanumerically!

MNEMONiCORNER

Next time you're dunking an Oreo think ***sink*** instead. Oreos were first sold in 1912…the year the Titanic sank!

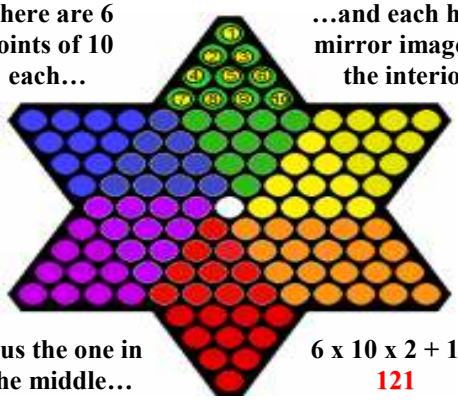


The lone member of rock band ZZ Top <u>without</u> a beard??? Frank Beard!

How many holes are in a Chinese checkerboard?

There are 6 points of 10 each…

…and each has a mirror image on the interior



Plus the one in the middle…

6 x 10 x 2 + 1 = 121