

**Twitter “war” Between Neil deGrasse Tyson and John Allen Paulos  
Friday, November, 13, 2015**



and



Although it lacks the immediacy of the real-time responses, this is the back-and-forth between Neil deGrasse Tyson and John Allen Paulos

I follow only one mathematician on Twitter — [@JohnAllenPaulos](#). So I'll make him the brunt of all my grumpy-man math-tweets.

Hey [@JohnAllenPaulos](#), I (and many others) still think there should be a big number called a Zillion. Please work on this.

Hi [@neiltyson](#). I hereby define a Zillion to be an indeterminately big number, and a Zzzillion to be so much bigger it's sleep-inducing.

Hey [@JohnAllenPaulos](#), Been wanting to divide by Zero all my life. But it's “undefined”. So get along and define the thing.

Hi [@neiltyson](#). The best I can do: divide by an infinitesimal (a number  $>$  than 0 but  $<$  every pos. real number). Can actually be made kosher.

Hey [@JohnAllenPaulos](#), Why not come up with a name for non-Euclidean Geometry, rather than telling us what it's not?

Hi [@neiltyson](#). Euclidean is the geometry of earthly life, so "cosmically curved geometry" instead of non-Euclidean (elliptic & hyperbolic)?

Hey [@JohnAllenPaulos](#), Why isn't 1 a prime number? Last I checked, it's divisible by itself and 1. Isn't that the rule?

Hi [@neiltyson](#). Mathematicians banished 1 from prime status so that every positive integer could be written uniquely as a product of primes.

Hi [@neiltyson](#). PS Speaking of primes, today triskaidekaphobia is supposed to reign supreme. Maybe we should banish 13 from primedom too? ;-)

Hey [@JohnAllenPaulos](#), Who had the deranged idea to name the square root of negative one "imaginary"?

Hi [@neiltyson](#).Culprits-Descartes, Bombelli, Hamilton? Since a square root is often called a surd, maybe we should call them absurd numbers.

Hey [@JohnAllenPaulos](#), Of the 5 regular solids  
Cube/Tetrahedron/Octahedron/Icosahedron/Dodecahedron four sound like dinosaurs

Hi [@neiltyson](#). Funny to see a museum sign "this way to the tetrahedron" & you go through the door & there you see a huge hanging tetrahedron.

Hey [@JohnAllenPaulos](#), The value of Pi at my NYC corner deli is \$9.49 a slice. What's the value Pi in Philadelphia, your home?

Hi [@neiltyson](#). Find another deli. Here in Philly, a whole pizza of radius  $z$  and depth  $a$  costs \$9.49 and has (cylindrical) volume  $\pi * z * z * a$ .

Hey [@JohnAllenPaulos](#), Why are the equilateral triangle & square the only regular shapes that can tile an area? I want more!

Hi [@neiltyson](#) Hexagons work too, but if you allow for other sorts of tilings, there are tons! The Alhambra castle in Spain has many of them.

But [@JohnAllenPaulos](#), aren't Hexagons just six equilateral triangles?

Hi [@neiltyson](#) Not quite, but maybe in some odd non-Euclidean geometry. I'm using that term again. ;-)

And [@JohnAllenPaulos](#), of course MC Escher (my favorite DJ) was a master at tiling surfaces. But not with Squares or Triangles

Hi [@neiltyson](#). I like Escher too. A more cognitive Salvador Dali.

Hey [@JohnAllenPaulos](#), If you can't teach a Chimp algebra, then what Math might intelligent aliens be unable to teach Humans?

Hi [@neiltyson](#). For anything (not just math) beyond our "complexity horizon," we'd be in position of dogs trying to learn constitutional law.

Hi [@neiltyson](#) I didn't mean to slight dogs, especially since a brilliant one, Shmata, who can do a lot that I can't, is at my feet.

Hey [@JohnAllenPaulos](#), You are the only Mathematician I follow on Twitter. Any others I should follow?  
[#FF](#)

Hi [@neiltyson](#). Happily, there are many. Rather than try to list them I refer you to [@republicofmath](#) who [#ff](#)'s mathematicians weekly.

Hey [@JohnAllenPaulos](#), You say you're a mathematician. But can you produce a mathematical proof to support this claim?

Hi [@neiltyson](#). I have a Ph.D. in math, "math prof" is on all my books, including my new one, A Numerate Life <http://bit.ly/1NQgIPW>. Q.E.D.

Hi [@neiltyson](#). In closing: you're not only a great astrophysicist, you're a mensch.

Thanks [@JohnAllenPaulos](#). Although I've always found you to be occasionally transcendental, yourself.

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A quirky hybrid of math & memoir, my new book A Numerate Life might give you an odd take on life, yours: [http://johnallenpaulos.com/a\\_numerate\\_life.html](http://johnallenpaulos.com/a_numerate_life.html) ...

Interview about my new book, A Numerate Life [http://johnallenpaulos.com/a\\_numerate\\_life.html](http://johnallenpaulos.com/a_numerate_life.html) ..., with Jim Stein: <http://bit.ly/1MshMBR>.