

April: The Math Poetry Month

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April is the month for Mathematics and Statistics awareness, as well as the National Poetry month. To me, it sounds like the Mathematics Poetry Month :-) (Before you object, yes, there is much in common between Mathematics and Poetry, see my comment at the end).

In these unusual times, as we are all stuck indoors and burdened with a constricted life, the joy of doing mathematics can help us overcome these restrictions. Here is a poem by Rita Dove that beautifully captures this feeling.

Geometry

I prove a theorem and the house expands:
the windows jerk free to hover near the ceiling,
the ceiling floats away with a sigh.

As the walls clear themselves of everything
but transparency, the scent of carnations
leaves with them. I am out in the open

And above the windows have hinged into butterflies,
sunlight glinting where they've intersected.
They are going to some point true and unproven.

-Rita Dove

I wish us all this joy regardless of what's happening in the world outdoors.

To say more about math and poetry. Henri Poincaré famously said "Mathematics is the art of calling different things by the same name." His point was that mathematical ideas occur in many forms and apply to many seemingly different aspects of mathematics, science and more. In fact this recognition of underlying commonality between seemingly unrelated problems is what gives power to our mathematical thinking. The same thinking is essential to the insight a poem gives through an apt metaphor connecting two seemingly unrelated subjects. The economy of thought and language, the tension between concrete and abstract, and the usage of same ideas to understand seemingly disparate objects and subjects - this is what makes both mathematics and poetry what they are.

What are your favorite mathematical poems?

Here is another one of mine, a beautiful poem by Wislawa Szymborska, one of the great poets of the 20th century. It is especially apt for the π Day last month.

Pi

The admirable number pi:
three point one four one.
All the following digits are also initial,
five nine two because it never ends.
It cant be comprehended six five three five at a glance,
eight nine by calculation,
seven nine or imagination,
not even three two three eight by wit, that is,
by comparison
four six to anything else
two six four three in the world.
The longest snake on earth calls it quits at about forty feet.
Likewise, snakes of myth and legend, though they may hold out a bit longer.
The pageant of digits comprising the number pi
doesnt stop at the pages edge.
It goes on across the table, through the air,
over a wall, a leaf, a birds nest, clouds,
straight into the sky,
through all the bottomless, bloated heavens.
Oh how brief a mouse tail, a pigtail is the tail of a comet!
How feeble the stars ray, bent by bumping up against space!
While here we have two three fifteen three hundred nineteen
my phone number your shirt size the year
nineteen hundred and seventy-three the sixth floor
the number of inhabitants sixty-five cents
hip measurement two fingers a charade, a code,
in which we find hail to thee, blithe spirit, bird thou never wert
alongside ladies and gentlemen, no cause for alarm,
as well as heaven and earth shall pass away,
but not the number pi, oh no, nothing doing,
it keeps right on with its rather remarkable five,
its uncommonly fine eight,
its far from final seven,
nudging, always nudging a sluggish eternity
to continue.

-Wislawa Szymborska

(Translated from Polish by Stanislaw Baranczak and Clare Cavanagh.)