Greenwich Maths Time

Peculiar Deaths of Famous Mathematicians

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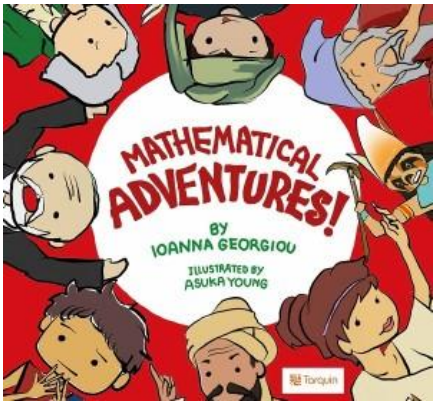
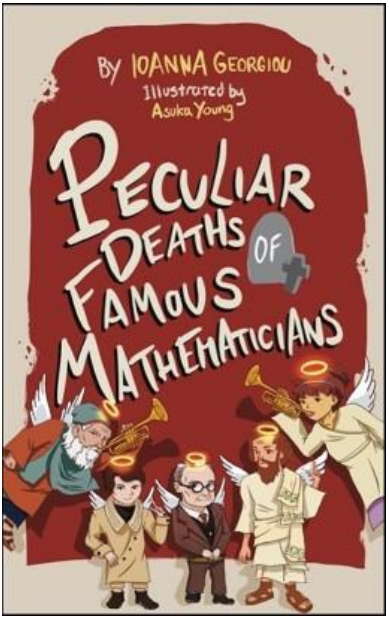
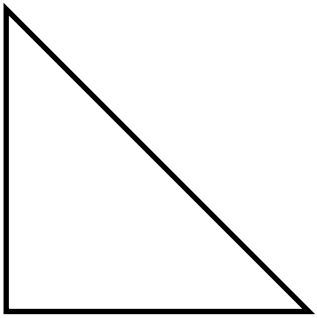




1. Hippasus

~500BC

Right-angled triangle, 1 unit * 1 unit



Proof by contradiction that the square root of 2 is irrational:

$$
\begin{aligned}
&Let\ \sqrt{2}\ be\ rational\ and\ that \\
&\sqrt{2} = \frac{n}{m}, in\ its\ lowest\ terms \\
&m\sqrt{2} = n \\
&square\ both\ sides\ to\ get \\
&2m^2 = n^2 \\
&So\ n\ must\ be\ even \\
&(a\ square\ number\ can\ only\ be\ even \\
&if\ the\ original\ number\ is\ even) \\
&and\ n^2\ must\ be\ divisible\ by\ 4 \\
&So\ m^2\ must\ also\ be\ even \\
&which\ implies\ m\ is\ also\ even \\
&So\ \frac{n}{m}\ is\ not\ reduced \\
&(at\ least\ 2\ as\ a\ common\ factor) \\
&Hence\ \sqrt{2}\ cannot\ be\ written\ as\ a\ fraction
\end{aligned}
$$

Hippasus Death

2. Hypatia

~360-415AD

$x - y = a,\ x^2 - y^2 = (x - y) + b$, where *a* and *b* are known values.

Hypatia's death

3. Abraham De Moivre

1667-1754

Independent events

$$P(A \cap B) = P(A) \times P(B)$$

De Moivre's death

4. Kurt Gödel

1906-1978

This statement cannot be proved

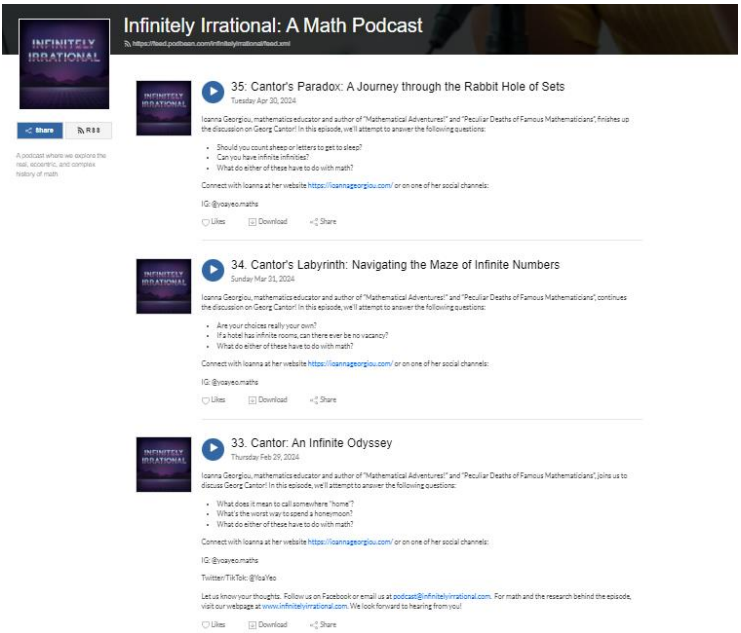
Gödel's death

Your vote on which death is true

Mathematician	Cause of Death	Vote
Hippasus		
Hypatia		
De Moivre		
Gödel		

Websites and Reading List

- Mathematical Adventures! (2020) by Ioanna Georgiou
- Peculiar Deaths of Famous Mathematicians (2022) by Ioanna Georgiou
- http://mathsisgoodforyou.com
- http://www.storyofmathematics.com/
- http://www.philosophers.co.uk/
- https://www.claymath.org/
- The parrot's theorem by Denis Guedj
- Uncle Petros and Goldbach's conjecture by Apostolos Doxiades
- Flatland, by Edwin Abbott
- Eagle, M.R. (1995) Exploring Mathematics Through History, Cambridge University Press: Bicester, Oxon
- Lumpkin, B., Strong, D. (1995) Multicultural Science and Math Connections; Middle School Projects and Activities J. Weston Walch Publisher Portland, Maine
- Addison-Wesley (1993) Multiculturalism in Mathematics, Science, and Technology: Readings and Activities Addison-Wesley Publishing Company
- Peculiar Deaths of Famous Mathematicians
- https://www.infinitelyirrational.com/



And an unsolved problem to end with:
Goldbach's Conjecture!

Is it true that *EVERY even integer can be written as the sum of two primes*?

What can you find about this conjecture?

How many attempts have there been to date?

Do you think it will ever be solved?

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