

<Baylor Mathematics> News Brief



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What's Happening?

A special dedication ceremony this month!

On February 26 – as part of Black History Month – Baylor University is honoring the memory of **Dr. Vivienne Malone-Mayes** (1932-1995), Baylor's first African American faculty member. A bronze head bust of Vivienne will be unveiled at this ceremony. After being denied entrance to graduate school at Baylor in 1961, Vivienne was hired in the Department of Mathematics in 1966, the same year that she earned her Ph.D. in mathematics from the University of Texas–Austin. She enjoyed a long career on our campus as a researcher and teacher. Vivienne was a talented musician at New Hope Baptist Church in Waco as well as a community leader and civil rights activist.



If you had a class with Vivienne AND have any thoughts or reflections about her that you wish to share, please send an email to me at Lance_Littlejohn@baylor.edu before Saturday, February 23. If time allows, I plan to read a few of these remembrances at the dedication ceremony. This ceremony will be broadcast live on Facebook at the link www.facebook.com/BaylorUniversity1845.



Math Curiosities

$$\sqrt[3]{512} = 5 + 1 + 2 = 8$$

$$\sqrt[3]{4913} = 4 + 9 + 1 + 3 = 17$$

$$\sqrt[3]{5832} = 5 + 8 + 3 + 2 = 18$$

$$\sqrt[3]{17576} = 1 + 7 + 5 + 7 + 6 = 26$$

$$\sqrt[3]{19683} = 1 + 9 + 6 + 8 + 3 = 27$$

$$\int_0^{\infty} \frac{\sin(x)}{x} dx = \frac{\pi}{2}$$

$$\int_0^{\infty} \frac{\sin(x)}{x} \frac{\sin(x/3)}{x/3} dx = \frac{\pi}{2}$$

$$\int_0^{\infty} \frac{\sin(x)}{x} \frac{\sin(x/3)}{x/3} \frac{\sin(x/5)}{x/5} dx = \frac{\pi}{2}$$

...

$$\int_0^{\infty} \frac{\sin(x)}{x} \frac{\sin(x/3)}{x/3} \dots \frac{\sin(x/13)}{x/13} dx = \frac{\pi}{2}$$

but

$$\int_0^{\infty} \frac{\sin(x)}{x} \frac{\sin(x/3)}{x/3} \dots \frac{\sin(x/15)}{x/15} dx$$

$$= \frac{467807924713440738696537864469}{935615849440640907310521750000} \pi$$

$$\sim \frac{\pi}{2} - 2.31 \times 10^{-11}.$$

Click [here](#) for more information.