Isn’t it Cool???

Hey, these were the solids that I was trying to get you all to see earlier last week when I first discussed the solids of revolution. Take those regions and twirl them around. Isn’t it cool?? I just was playing around with a math program and got it to work. With the program, I could look inside the solids and look at slices and everything. Now if you want to see some of this cool stuff, I can show you during my office hours next week. Look at some of the solids from Homework #49 p.285; (#4 and #10). Mathematics is beautiful.

4a)

The Volume of Revolution Around the Horizontal Axis Between

\[ f(x) = 4 - 2^x \]

and

\[ g(x) = 0 \]

on the Interval \([1, 27]\)
4b)

The Volume of Revolution Around the Vertical Axis Between

\[ f(x) = 4 - 2^x \]

and

\[ g(x) = 0 \]

on the Interval \([0, 2]\)
The Volume of Revolution Around the Horizontal Axis Between

\[ f(x) = x^{2/3} \]

and

\[ g(x) = 0 \]

on the Interval \([1, 27]\)
The Volume of Revolution Around the Horizontal Axis Between

\[ f(x) = x^{(2/3)} \]

and

\[ g(x) = 0 \]

on the Interval \([1, 27]\)

This is just turned upside down so you can see the insides.