Lecture 1

Wednesday, August 30, 2023 2:24 PM

* Prayer

Question to ponder: why do we need to learn math when we can use calculators and computers, which can do a much better job than we do?

Math > computation

$\frac{1}{0.0000001}$ is a very large number. I don't need a computer to know that.

Math helps develop our brain. We need our brain to make decisions in life. Calculators and computers can only do the technical part of Math. It cannot think for us. Learning Math can help us become more like God.

Syllabus:

- Homework — 20%
- Quizzes — 10%
- Labs — 10%
- Attendance — 10% + extra credit
- Midterm 1 — 15%
- Midterm 2 — 15%
- Final exam — 20%

Midterm 1 : 10/2 - 10/3
Midterm 2 : 11/6 - 11/7
} at Testing Center

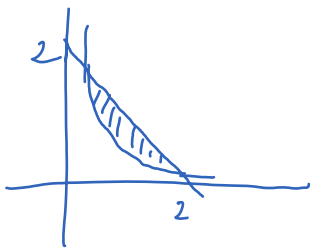
Final : 12/6 in the class

Calculus II : built on Calc I { derivatives, integral

Calculus II { application of integral in findin area, volume, arc length
solve differential equation, some modelling
Curves : not all curves are graphs of a function.
Sequences, series

Ex Area under the curve $y = \frac{1}{x}$, when $x \in [1, 2]$.

$\int_1^2 \frac{1}{x}\,dx$



$\int_1^2 \left(2 - x - \frac{1}{x}\right) dx$