

DEPARTMENT OF MATHEMATICS

Course Code & Name : **23MAT101-Matrices and Calculus**

Course Faculty : **Ms.S.SINDHUJA**

Puzzles/In Class Activities

Topics Covered: **Unit V – Multiple Integrals**

Riddle 1:

"I am the sum of countless tiny squares, but I have no thickness. I measure the size of a flat shape, but a simple ruler isn't enough. What am I?"

What am I?



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Area (found using a double integral)

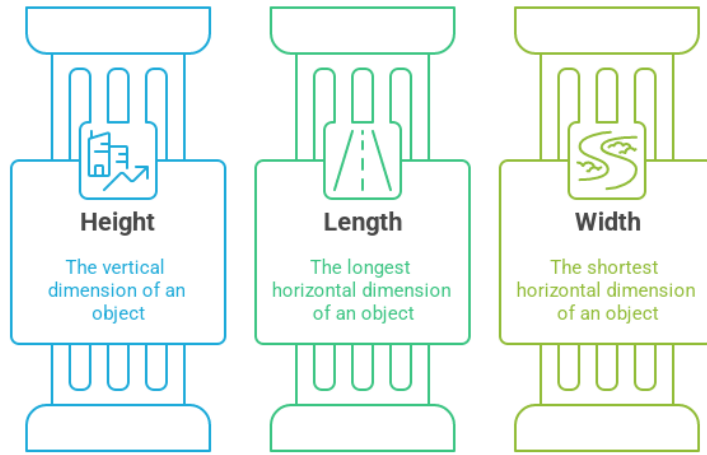


Made with  Napkin

Answer: Area (found using a double integral)

Riddle 2:

"I am an extension of my flat friend [Area]. I have height, length, and width, and can hold water (or air). If you stack infinitely many slices of him, you get me. What am I?"



Answer: Volume (found using a triple integral)