

The following represents the area of a region bounded by the x-axis, the lines $x = a$ and $x = b$, and the function $y = f(x)$. You are to sketch the region and approximate its area using S_L , S_U , and S_M . (Use $n = 5$.)

Show all of your work neatly organized. The exact area is given for comparison to your approximations.

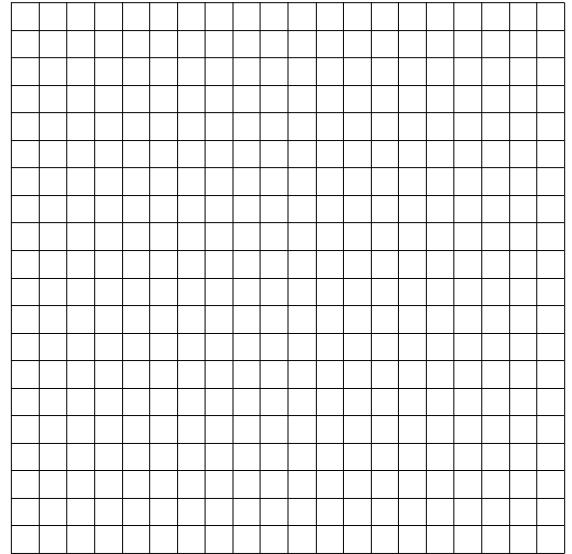
1. $\int_1^3 (x^2 + 1)dx$

(A = 32/3)

$S_L =$ _____

$S_U =$ _____

$S_M =$ _____



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The following represents the area of a region bounded by the x-axis, the lines $x = a$ and $x = b$, and the function $y = f(x)$. You are to sketch the region and approximate its area using S_L , S_U , and S_M . (Use $n = 5$.)

Show all of your work neatly organized. The exact area is given for comparison to your approximations.

2. $\int_4^9 \sqrt{x} \, dx$

(A = 38/3)

$S_L =$ _____

$S_U =$ _____

$S_M =$ _____

