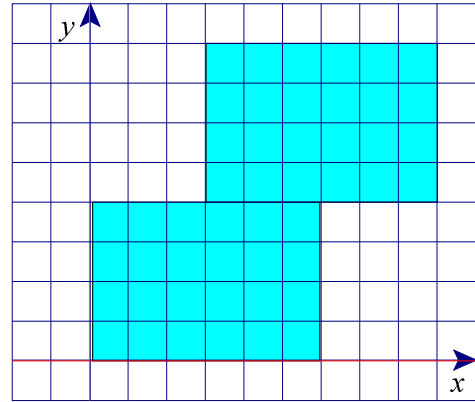


DIRECTIONS To receive full credit, you must provide complete legible solutions to the following problems in the space provided. Transfer all your answers to the space provided on the test paper.

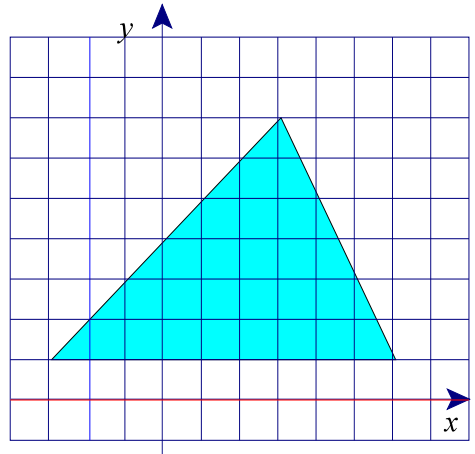
1. Find the center of mass of the lamina shown in the figure. Use $\rho=1$. Use 2x2 Grid.

Ans _____



3. Set up an integral for the moment about the x axis of the lamina shown in the figure. Use $\rho=1$, and 2x2 Grid.

Ans _____



3. Find the centroid of the region bounded by the given curves.

$$y = x^3, \quad x + y = 2, \quad y = 0$$

Ans _____

4. Calculate the moments M_x and M_y and the center of mass of a lamina with the given density and shape.

Ans _____

