





$$A_1 = 10 \times 20$$

$$A_1 = 200 \text{ cm}^2$$

$$x_1 = 10/2 = 5 \text{ cm}$$

$$y_1 = 20/2 = 10 \text{ cm}$$
$$10 + 30 = 40 \text{ cm}$$

$$CGX = \frac{200(5) + 1413.72(12.73)}{200 + 1413.72}$$

$$\frac{1000 + 17996.65}{1613.72 \text{ cm}^2}$$

$$\frac{18996.65 \text{ cm}^3}{1613.72 \text{ cm}^2}$$

$$\Delta CGX = 11.77 \text{ cm}$$

$$CGY = \frac{200(40) + 1413.72(30)}{1613.72 \text{ cm}^2}$$

$$A_2 = \frac{\pi r^2}{2}$$

$$A_2 = \frac{3.14(6(30))^2}{2}$$

$$A_2 = 1413.72 \text{ cm}^2$$

$$y_2 = 30$$

$$x = \frac{4(30)}{3(3.14(6))}$$

$$x_2 = \frac{120}{9.42}$$

$$x_2 = 12.73$$

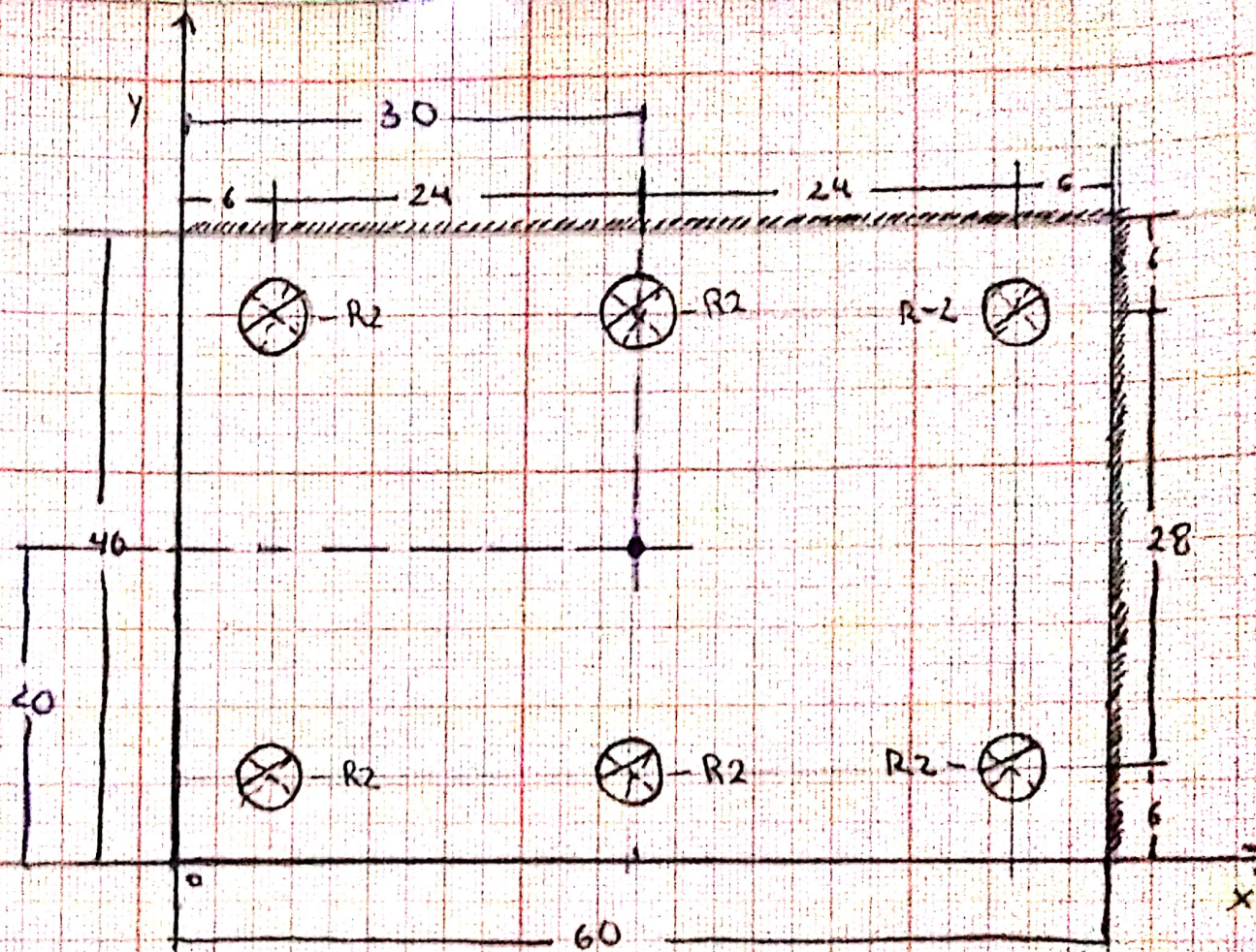
$$CGY = \frac{8000 + 42411.6}{1613.72}$$

$$CGY = \frac{50411.6 \text{ cm}^3}{1613.72 \text{ cm}^2} = 31.23 \text{ cm}$$

Maylar



4



$$A_1 = 60 \times 40$$

$$A_1 = 2400 \text{ cm}^2$$

$$x_1 = 60/2 = 30 \text{ cm}$$

$$y_1 = 40/2 = 20 \text{ cm}$$

$$A_4 = -12.566 \text{ cm}^2$$

$$x_4 = 30 \text{ cm}$$

$$A_2 = 3.1416(4)$$

$$A_2 = 12.566 \text{ cm}^2$$

$$x_2 = 6 \text{ cm}$$

$$y_2 = 6 \text{ cm}$$

$$A_5 = -12.566 \text{ cm}^2$$

$$x_5 = 30 \text{ cm}$$

$$A_3 = -12.566 \text{ cm}^2$$

$$x_3 = 6 \text{ cm}$$

$$y_3 = 34 \text{ cm}$$

$$40 - 6 = 34 \text{ cm}$$

$$A_6 = -12.566 \text{ cm}^2$$

$$x_6 = 50 - 6 = 54 \text{ cm}$$

$$y_6 = 6 \text{ cm}$$



$$A_1 = 60 \times 40$$

$$A_1 = 2400 \text{ cm}^2$$

$$X_1 = 60/2 = 30 \text{ cm}$$

$$Y_1 = 40/2 = 20 \text{ cm}$$

$$A_4 = -12.566 \text{ cm}^2$$

$$X_4 = 30 \text{ cm}$$

$$Y_4 = 6 \text{ cm}$$

$$A_2 = -12.566 \text{ cm}^2$$

$$X_2 = 54 \text{ cm}$$

$$Y_2 = 34 \text{ cm}$$

$$40 - 6 = 34 \text{ cm}$$

$$A_2 = 3.9116(4)$$

$$A_2 = -12.566 \text{ cm}^2$$

$$X_2 = 6 \text{ cm}$$

$$Y_2 = 6 \text{ cm}$$

$$A_5 = -12.566 \text{ cm}^2$$

$$X_5 = 30 \text{ cm}$$

$$Y_5 = 40 - 6 = 34 \text{ cm}$$

$$A_3 = -12.566 \text{ cm}^2$$

$$X_3 = 6 \text{ cm}$$

$$Y_3 = 34 \text{ cm}$$

$$40 - 6 = 34 \text{ cm}$$

$$A_6 = +12.566 \text{ cm}^2$$

$$X_6 = 50 - 6 = 44 \text{ cm}$$

$$Y_6 = 6 \text{ cm}$$

CGX =

$$2400(30) + (-12.566)(6) + (-12.566)(6) + (-12.566)(6) + (-12.566)(36) + (-12.566)(54) + (-12.566)(54)$$

$$2400 + (-12.566) + (-12.566) + (-12.566) + (-12.566) + (-12.566) + (-12.566)$$

$$\frac{69738.128 \text{ cm}^2}{2324.604 \text{ cm}^2} = 30.00 \text{ cm} = \underline{\underline{CGX = 30 \text{ cm}}}$$



$$C_G = 2400(20) + (-12.566)(6) + (-12.566)(34) + (-12.566)(6) + (-12.566)(34) + (-12.566)(6) + (-12.566)(34)$$

$$2324.604 \text{ cm}^2$$

$$C_G = 48000 - 75.396 - 427.244 - 75.396 - 427.244 - 75.396 - 427.244$$

$$2324.604 \text{ cm}^2$$

$$\frac{48000 - 1507.92}{2324.604 \text{ cm}^2}$$

$$= \frac{46492.08 \text{ cm}^3}{2324.604 \text{ cm}^2}$$

$$C_G = 20 \text{ cm}$$