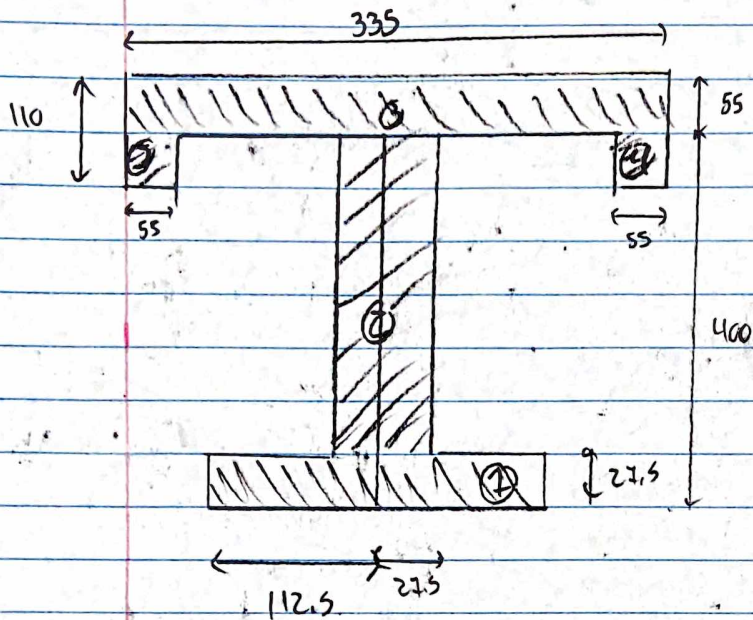


Solution: 21-5-9.2-MK-01



$$A_1 = (112.5)(2)(27.5) = 6187.5$$

$$A_2 = (400 - 27.5)(27.5 \times 2) = 20487.5$$

$$A_3 = (55)(335) = 18425$$

$$A_4 = (110 - 55)(55) = 3025$$

$$A_5 = A_4 = 3025$$

$$\Sigma A = 51150 \text{ mm}^2$$

$$y_1 = 27.5/2 = 13.75$$

$$y_2 = (400 - 27.5)/2 + 27.5 = 213.75$$

$$y_3 = 400 + 55/2 = 427.5$$

$$y_4 = 400 - (110 - 55)/2 = 372.5 = y_5$$

$$\Sigma A y = (6187.5)(13.75) + (20487.5)(213.75) + (18425)(427.5) + 2(372.5)(3025)$$

$$\Sigma A y = 14594593.75$$