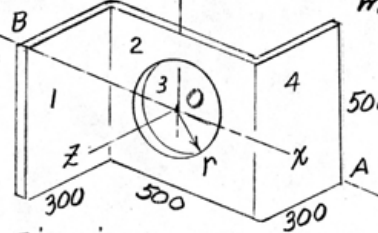


B/65  $\overline{OB} = \sqrt{(250)^2 + (250)^2 + (300)^2} = 464 \text{ mm}$   
 $r = 150$  Direction cosines of OB are  $l = -\frac{250}{464} = -0.539$   
 $m = \frac{250}{464} = 0.539$ ,  $n = \frac{300}{464} = 0.647$

Masses are  
 $m_1 = m_4 = 7830(0.3)(0.5)(0.015) = 17.62 \text{ kg}$   
 $m_3 = -7830(17)(0.150)^2(0.015) = -8.30 \text{ kg}$   
 $m_2 = 7830(0.5)^2(0.015) = 29.36 \text{ kg}$



Dim. in mm

	1	2	3	4	Totals (kg·m <sup>2</sup> )
$I_{xx}$	0.896	0.612	-0.047	0.896	2.356
$I_{yy}$	1.630	0.612	-0.047	1.630	3.825
$I_{zz}$	1.468	1.223	-0.093	1.468	4.067
$I_{xz}$	-0.661	0	0	-0.661	-1.321

Substitute into Eq. B/10 & get  
 $I_{AB} = 2.356(-0.539)^2 + 3.825(0.539)^2 + 4.067(0.647)^2$   
 $- 2(-1.321)(-0.539)(0.647)$  where  $I_{xy} = I_{yz} = 0$   
 $I_{AB} = 2.58 \text{ kg·m}^2$