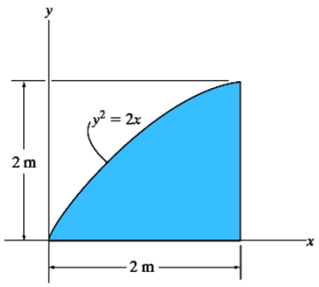
Exercise

•10–5. Determine the moment of inertia of the area about the x axis.

2.13 m^4

10–6. Determine the moment of inertia of the area about the y axis.

4.57 m^4

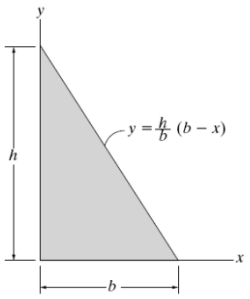


***10–16.** Determine the moment of inertia of the triangular area about the x axis.

$\frac{1}{12}bh^3$

•10–17. Determine the moment of inertia of the triangular area about the y axis.

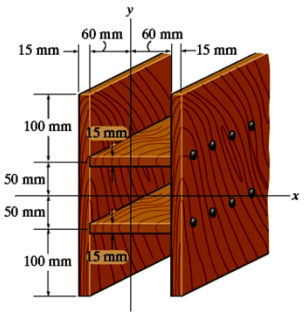
$\frac{1}{12}hb^3$



Exercise

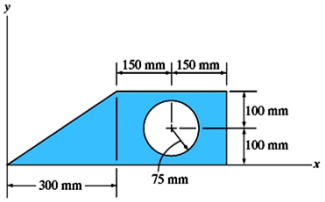
10–30. Determine the moment of inertia of the beam's cross-sectional area about the x axis.

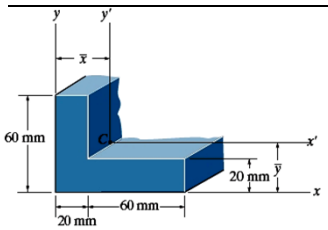
76.6 $(10)^6$ mm^4



•10–33. Determine the moment of inertia of the composite area about the y axis.

10.3 $(10)^9$ mm^4





***10–44.** Locate the centroid $\bar{x}$ of the cross-sectional area for the angle. Then find the moment of inertia $I_{y'}$ about the y' centroidal axis.

136 $(10)^4$ mm^4