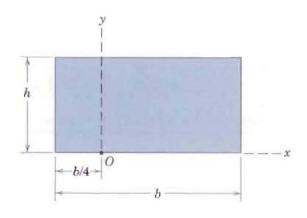
作業 11

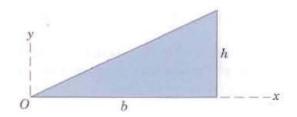
A/2

Determine the moments of inertia of the rectangular area about the *x*- and *y*-axes and find the polar moment of inertia about point *O*.



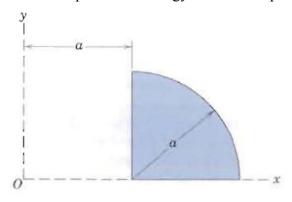
A/5

Determine by direct integration the moment of inertia of the triangular area about the *y*-axis.

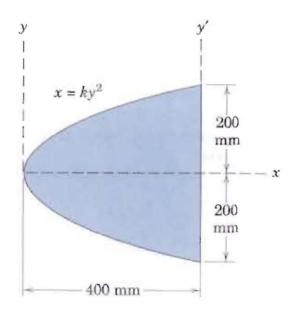


A/14

Determine the moments of inertia of the quarter-circular area about the *x*- and *y*-axes, and find the polar radius of gyration about point *O*.

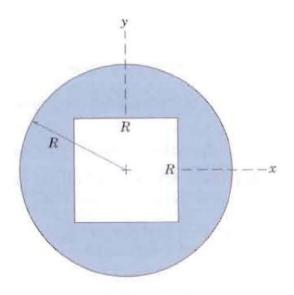


A/23 Determine the moments of inertia of the shaded area about the *y*- and y'-axes.



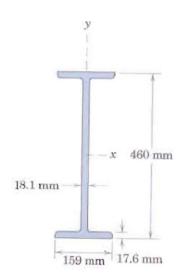
A/37

Determine the polar moment of inertia of the circular area without and with the central square hole.



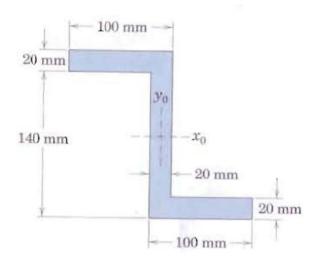
A/39

The cross-sectional area of a wide-flange I-beam has the dimensions shown. Obtain a close approximation to the handbook value of $\overline{I}_x = 385(10^6) \text{ mm}^4$ by treating the section as being composed of three rectangles.



A/43

Determine the moments of inertia of the Z-section about its centroidal x_0 - and y_0 -axes.



A/51 Calculate the polar radius of gyration of the shaded area about its centroid *C*.

