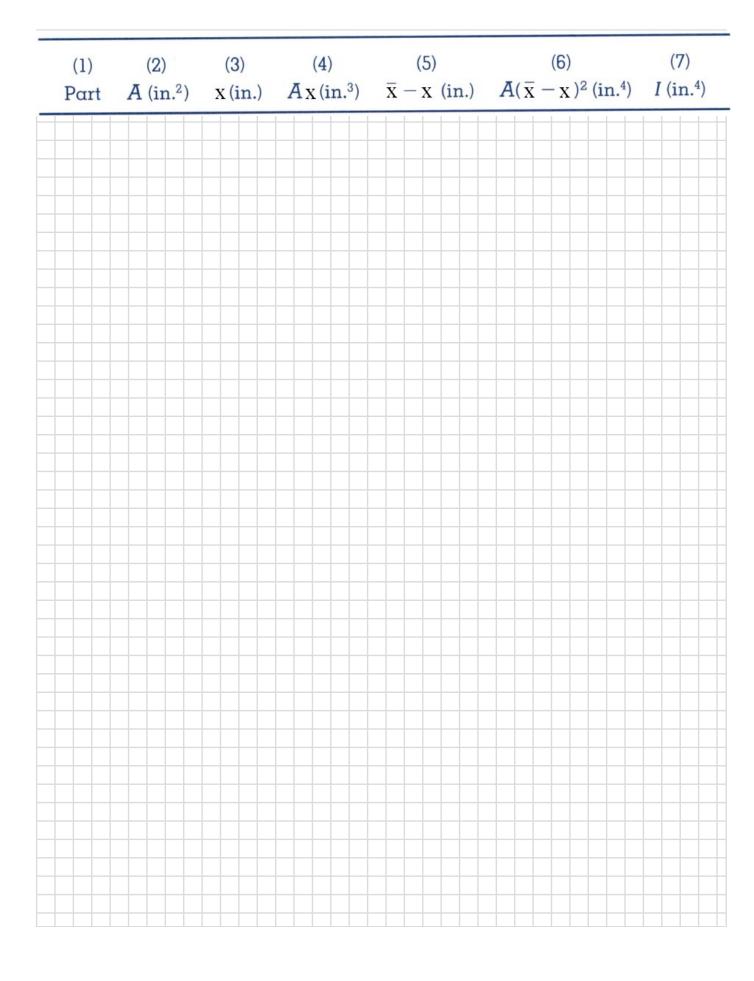
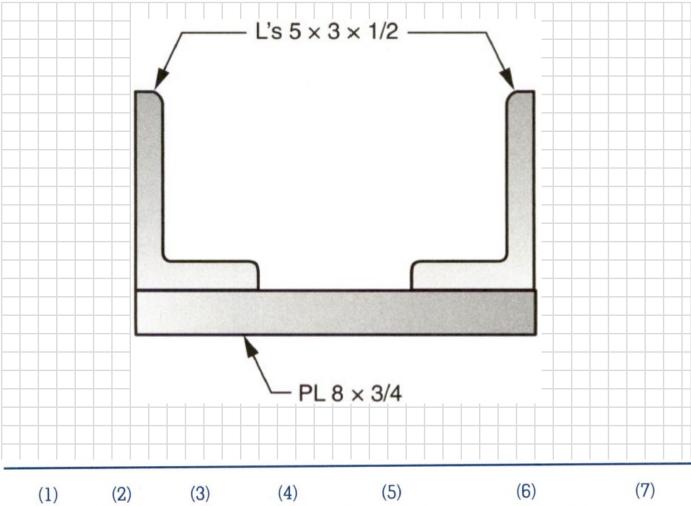
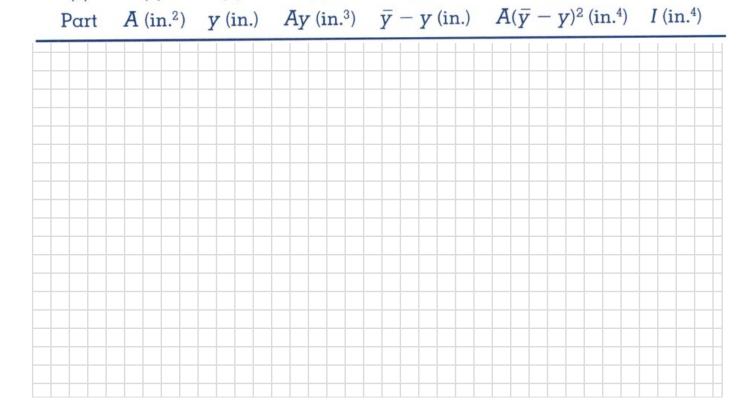
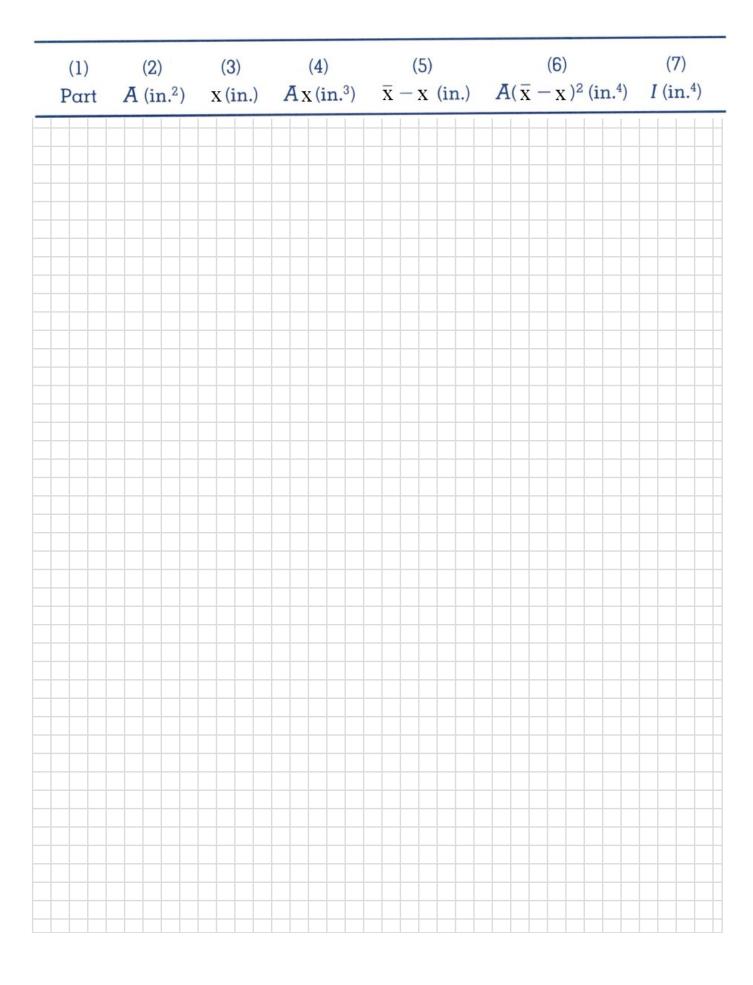
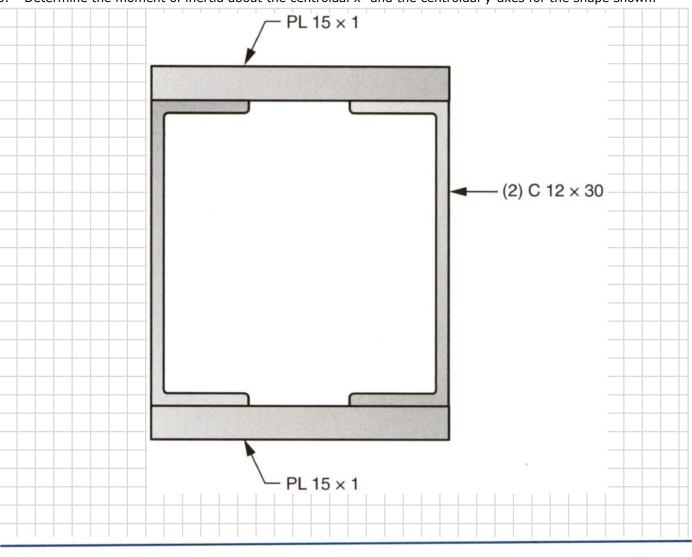
1. Determine the moment of inertia about the centroidal x- and the centroidal y-axes for the shape shown. PL 16 × 1 C 12 × 30  $C12 \times 30$ (2) (3) (4) (5) (6) (7)  $A(\text{in.}^2)$  y (in.)  $Ay \text{ (in.}^3)$  y (in.)  $A(y \text{ (in.}^4))$   $A(y \text{ (in.}^4))$ (1)Part

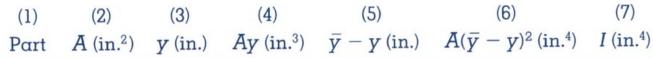




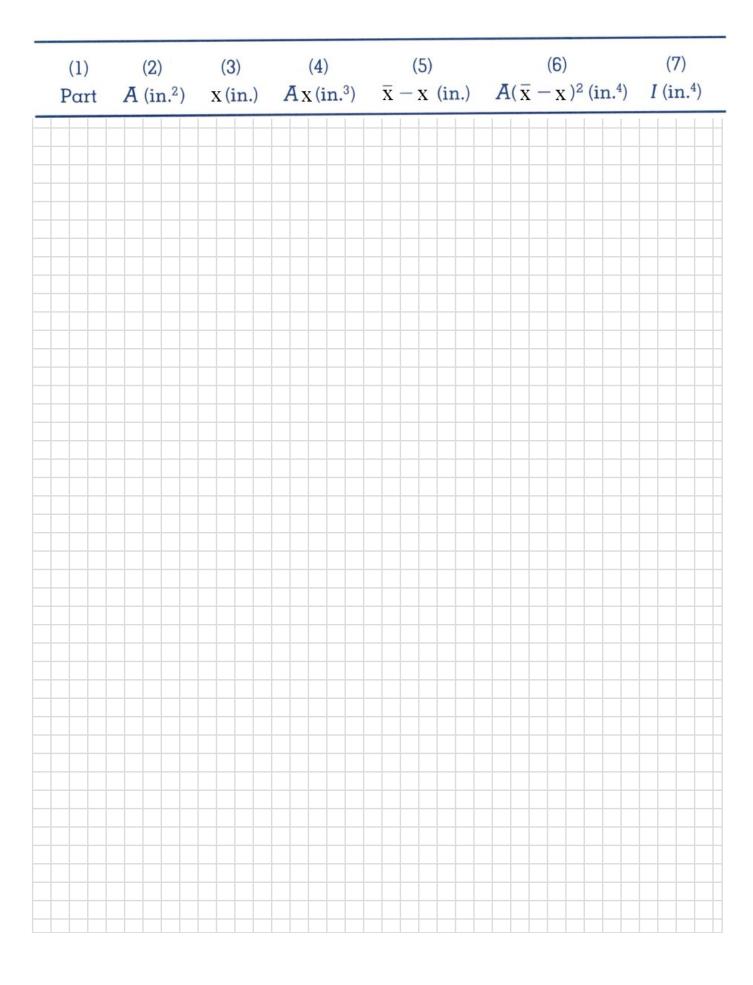




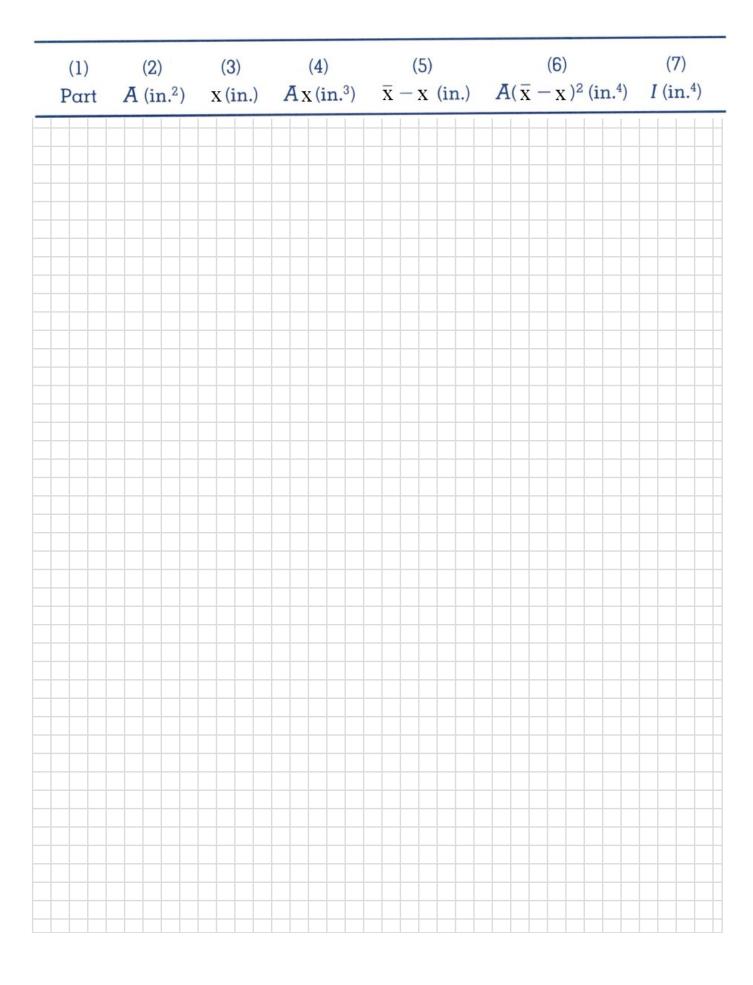




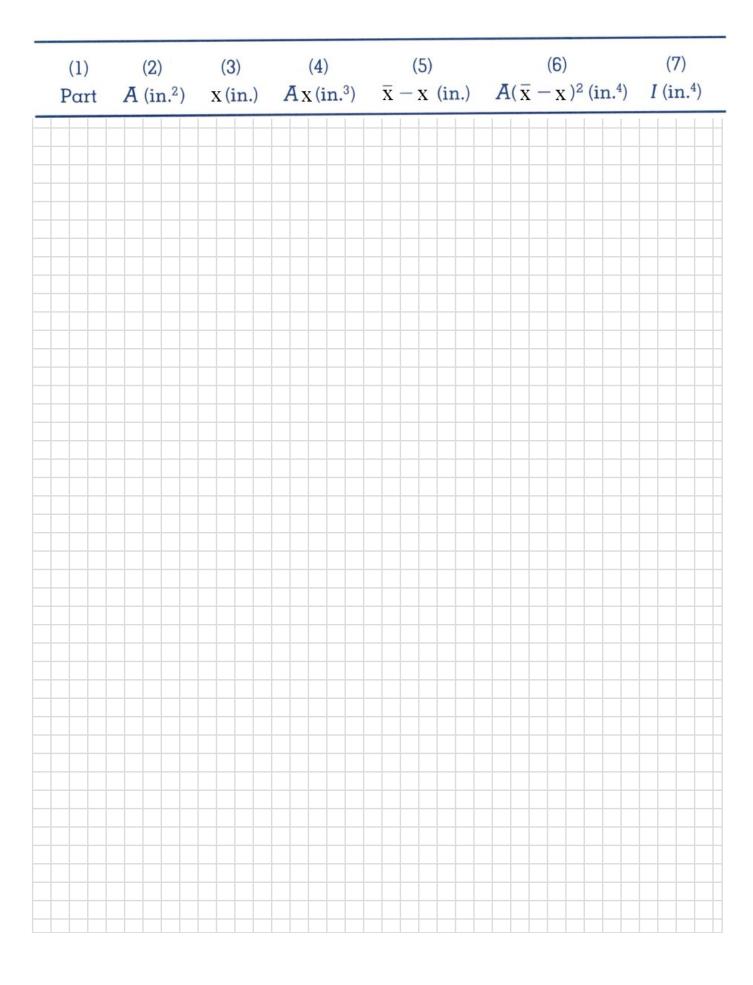


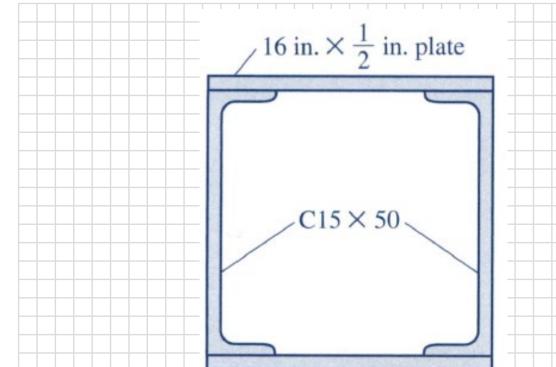


4. Determine the moment of inertia about the centroidal x- and the centroidal y-axes for the shape shown. PL 12 × 1 ALL ANGLES  $6 \times 4 \times 1/2$ LONG LEGS HORIZONTAL (2) (3) (4) (5) (6) (7)  $A(\text{in.}^2)$  y(in.)  $Ay(\text{in.}^3)$   $\bar{y} - y(\text{in.})$   $A(\bar{y} - y)^2(\text{in.}^4)$   $I(\text{in.}^4)$ (1)(2) Part



5. Determine the moment of inertia about the centroidal x- and the centroidal y-axes for the shape shown. 5 in. 1 in. 3 in. ← 1 in. 1 in. 2 in. (1) (2) (3) (4) (5) (6) (7) Part  $A(\text{in.}^2)$  y(in.)  $Ay(\text{in.}^3)$   $\bar{y}-y(\text{in.})$   $A(\bar{y}-y)^2(\text{in.}^4)$   $I(\text{in.}^4)$ 





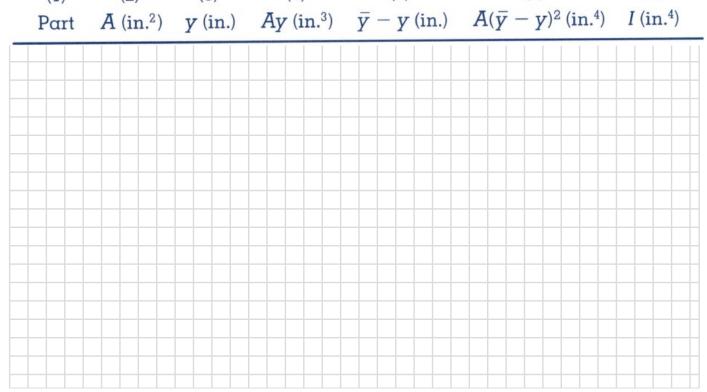
16 in.  $\times \frac{1}{2}$  in. plate

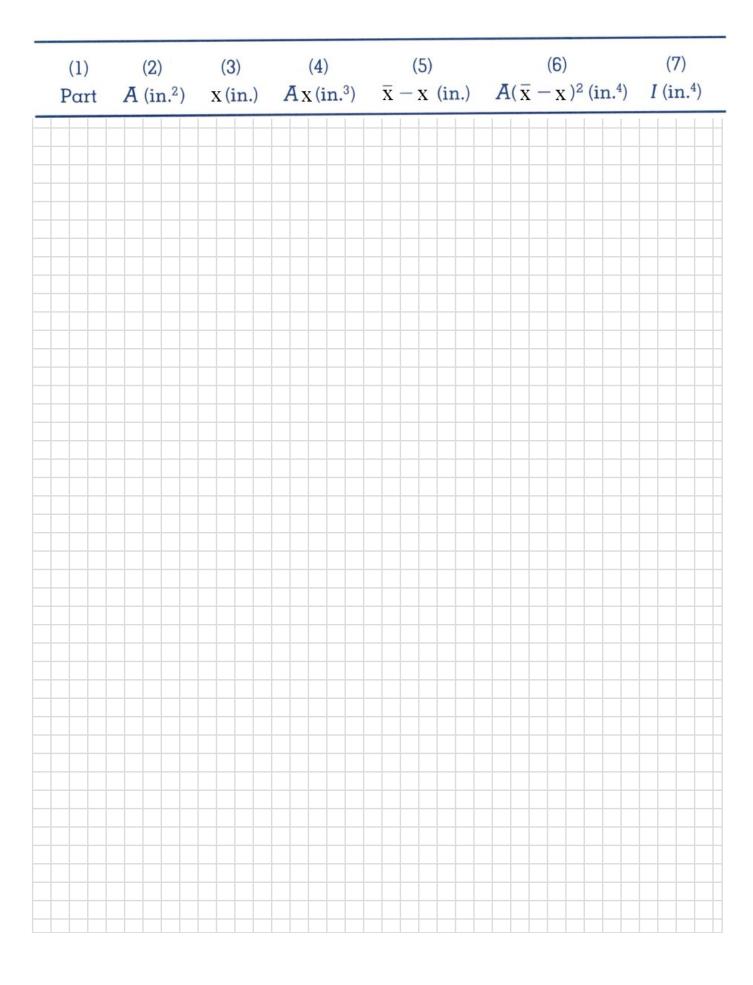
(2) (1)

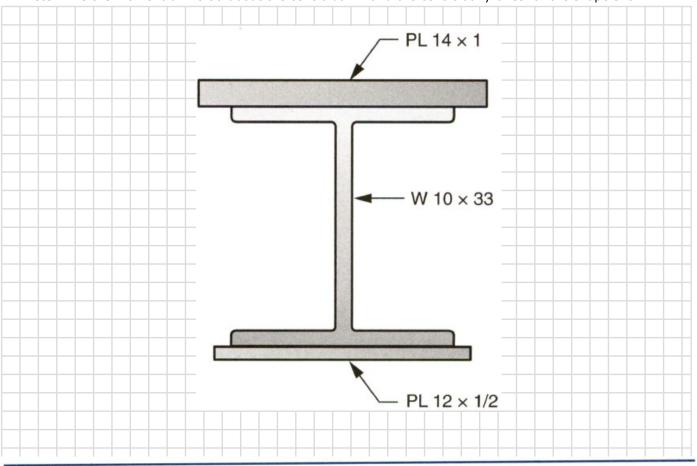
(3) (4) (5)

(6)

(7)







(1) (2) (3) (4) (5) (6) (7) Part  $A(\text{in.}^2)$  y(in.)  $Ay(\text{in.}^3)$   $\bar{y}-y(\text{in.})$   $A(\bar{y}-y)^2(\text{in.}^4)$   $I(\text{in.}^4)$ 

