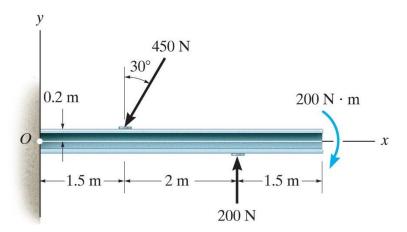
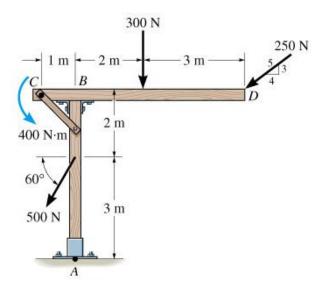


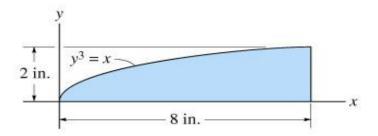
Replace the system by an equivalent force and moment at point P.



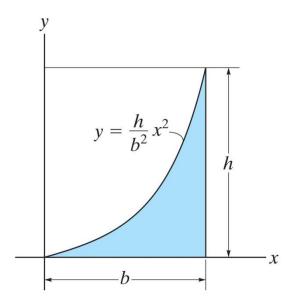
Replace the loading with an equivalent force and specify where this force intersects the centerline of the beam, measured from point O.



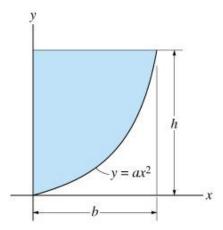
Replace the loading on the frame with a resultant force and specify where its line of action intersects member CD, measured from C.



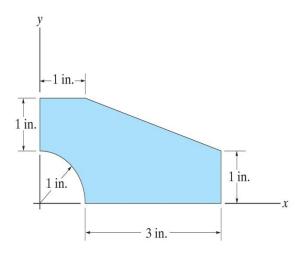
Find x bar & y bar of the shaded area.



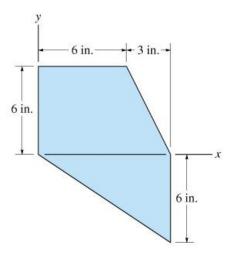
Calculate x bar of the shaded area. Take b=2 inches and h=3 inches.



Find x bar of the shaded area. Take a=3 mm, b=2 mm, and h=12 mm.



Locate the centroid (x bar, y bar) of the shaded area.



Locate the centroid of the area from both the *x* and *y* axes.