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[ STUDENT > restart;
[ STUDENT >
[ STUDENT > Imass:=simplify(int(int((x^2+y^2)*rho,x=-b/2..b/2),y=-h/2.
    .h/2) * (m / (b*h*rho)));

$$I_{mass} := \frac{1}{12} (b^2 + h^2) m$$

[ STUDENT > # Above agrees with result.
[ STUDENT > # Repeat by showing more intermediate steps (I1 and I2 are
    intermediate integrals, suffix withlimits means they are
    applied with limits of integration):
[ STUDENT > I1:=int((x^2+y^2)*rho,x);

$$I1 := \rho \left( \frac{1}{3} x^3 + y^2 x \right)$$

[ STUDENT > I1withlimits:=int((x^2+y^2)*rho,x=-b/2..b/2);

$$I1withlimits := \frac{1}{12} \rho b^3 + \rho y^2 b$$

[ STUDENT > I2:=int(I1withlimits,y);

$$I2 := \frac{1}{12} \rho b^3 y + \frac{1}{3} \rho y^3 b$$

[ STUDENT > I2withlimits:=int(I1withlimits,y=-h/2..h/2);

$$I2withlimits := \frac{1}{12} \rho b^3 h + \frac{1}{12} \rho h^3 b$$

[ STUDENT > Imass:=simplify(I2withlimits*m/(rho*b*h));

$$I_{mass} := \frac{1}{12} (b^2 + h^2) m$$

[ STUDENT >

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