



The reference frame is  $xyz$  with the origin at  $A$ .  
 $G$  is the mass center of the triangular prism  $ABCA'B'C'$ .  
 $G_P$  is the mass center of the rectangular or square prism  $ABEFA'B'E'F'$ .  
 $m$  is the mass of the triangular prism  $ABCA'B'C'$ .  
 $M$  is the mass of the rectangular prism  $ABEFA'B'E'F'$

$$x_G = \frac{x_A + x_B + x_C}{3} = \frac{b + \sqrt{a^2 - h^2}}{3} \quad y_G = \frac{y_A + y_B + y_C}{3} = \frac{h}{3}$$

$$x_{G_P} = \frac{h}{2} \quad y_{G_P} = \frac{b}{2}$$

$$I_G = \frac{I_{G_P}}{2} + m (GG_P)^2 = \frac{M}{12} (b^2 + h^2) + m (GG_P)^2$$

$$M = \rho b h d \quad m = \frac{\rho b h d}{2}$$

$$(GG_P) = \sqrt{(x_{G_P} - x_G)^2 + (y_{G_P} - y_G)^2}$$

Figure