6. BRYŁA SZTYWNA

6.1. a) $I = 2ma^2$; b) $I = 4ma^2$; c) $I = 2m(a^2 + 2f^2)$

6.2. a) $I = ma^2$; b) $I = 2ma^2$; c) $I = \frac{ma^2}{2}$

6.3.

a) $I = Mr^2$

b) $I = \frac{Ml^2}{12}$

c) $I = \frac{Ml^2}{3}$

d) $I = \frac{MR^2}{2}$

e) $I = \frac{MR^2}{2}$

f) $I = \frac{\sigma a h^3}{12}$

g) $I = \frac{\sigma a h^3}{4}$

h) $I = \frac{2}{3}mR^2$

i) $I = \frac{2}{5}mR^2$

6.4. $I = \frac{3md^2}{8}$

6.5. $I = \frac{m}{2}(R^2 + r^2 + 2a^2)$

6.6. $I = 2mr^2$

6.7. $I = m\left(\frac{2}{5}\frac{R^5 - r^5}{R^3 - r^3} + R^2\right)$

6.8. a) $I = \frac{1}{8}Ml^2$; b) $I = \frac{1}{8}Ml^2 + \frac{3}{2}mR^2$; c) $I = 3mR^2$

6.9. $\varepsilon = \frac{2T}{2ml^2 + 3MR^2 + 6M(l+R)^2}$

6.10. $I = mr^2\left(\frac{g\Delta t^2}{2h} - 1\right)$

6.11. $E_K = \rho l n^2 \pi^3 (R^4 - r^4)$