

B/8

$$\begin{aligned}\text{Percent error } e &= \frac{\frac{1}{12}ml^2 - (\frac{1}{12}ml^2 + \frac{1}{4}mr^2)}{\frac{1}{12}ml^2 + \frac{1}{4}mr^2}(100) \\ &= \frac{-100}{1 + \frac{1/3}{(r/l)^2}} \quad (\text{in percent})\end{aligned}$$

Values :

$r/l$	$e$
0.01	-0.030 %
0.1	-2.91 %
0.5	-42.9 %