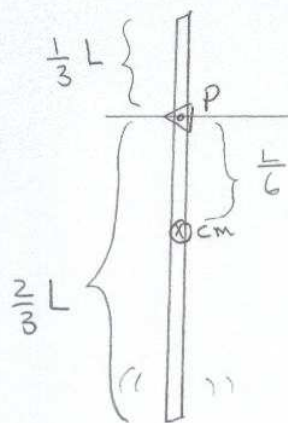


What is the Period now?

14-14

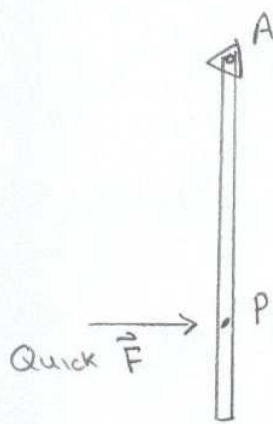


$$T_P = 2\pi \sqrt{\frac{I_P}{MgD}} = 2\pi \sqrt{\frac{I_{cm} + Mh^2}{MgD}}$$

$$T_P = 2\pi \sqrt{\frac{\frac{1}{12}ML^2 + M\left(\frac{L}{6}\right)^2}{Mg\left(\frac{L}{6}\right)}} = 2\pi \sqrt{\frac{\frac{1}{12}L^2 + \frac{1}{36}L^2}{g/6}}$$

$$T_P = 2\pi \sqrt{\frac{2}{3} \frac{L}{g}}$$

$\therefore T_P$  is the same as when it was pivoted about axis  $\nabla A$ .



★ If an Impulsive Force  $\vec{F}$  as shown acts at the "center of Percussion" P, No Reaction force is "felt" at the support point  $\nabla A$ . Give an example...?