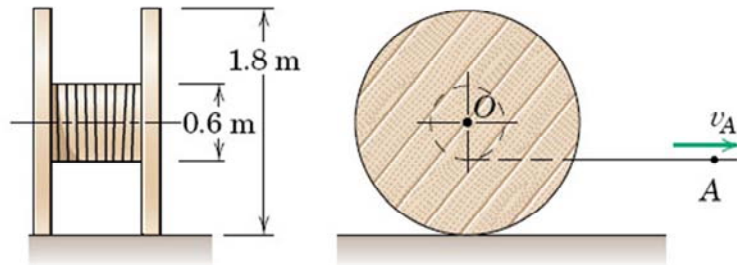


Question of the Day



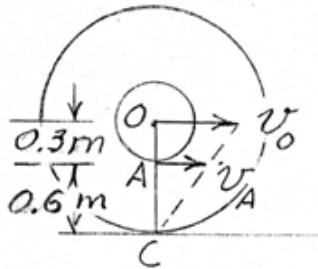
The cable reel rolls without slipping on the horizontal surface. Point A on the cable has a **velocity** $v_A = 0.8 \text{ m/s}$ to the right.

Compute the **velocity** of the center O and the **angular velocity** ω of the reel.

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$$v_o = \overline{OC} \omega = \frac{\overline{OC}}{\overline{AC}} v_A = \frac{0.9}{0.6} 0.8 = \underline{1.2 \text{ m/s}}$$



$$\omega = \frac{v_A}{\overline{AC}} = \frac{v_o}{\overline{OC}} = \frac{1.2}{0.9} = \underline{1.333 \text{ rad/s CW}}$$