

A 1.2 ft. diameter ball is thrown onto a rough surface such that it has a velocity of 6 ft/s and a backspin angular velocity of  $\omega$ . If it is to stop backsplining at the same instant as the velocity is 0, the backspin  $\omega$  in rad/s is what? Hint: The answer is independent of the mass and coefficient of friction.

$$I = \frac{2}{5} m r^2$$

Show Work

- a. 17.8
- b. 22.0
- c. 25.0
- d. 28.1

