**Problem 13.1**
A 3-in.-radius drum is rigidly attached to a 5-in.-radius drum as shown. One of the drums rolls without sliding on the surface shown, and a cord is wound around the other drum. End $E$ of the cord is pulled to the left with a velocity of $v = 6$ in/s. Determine:
- a) angular velocity of the drums
- b) velocity of the center of the drums
- c) length of cord wound or unwound per second.

**Problem 13.2**
At the instant shown, the angular velocity of rod $AB$ is $\omega = 15$ rad/s clockwise. Determine:
- a) Angular velocity of rod $BD$
- b) Velocity of the midpoint of rod $BD$