

Problem 4.47

The schematic of a cyclist's right leg is shown to the right. If the crank has a constant angular velocity ω_{AB} of 0.5 r/s, CW, determine the angular acceleration of the thigh CD at the instant shown. Consider the hip-seat (D), knee (C), and pedal (B) connections to be smooth pins. The ankle joint is rigid. The bike (frame) is moving forward at a constant speed.

