2. The figure below gives the angular speed versus time for a thin rod that rotates around one end. The vertical axis is marked in increments of 2 rad/s.

A. What is the magnitude of the rod's angular acceleration?

B. At \( t = 4.0 \, \text{s} \), the rod has a rotational kinetic energy of 1.30 J. What is its kinetic energy at \( t = 0 \)?