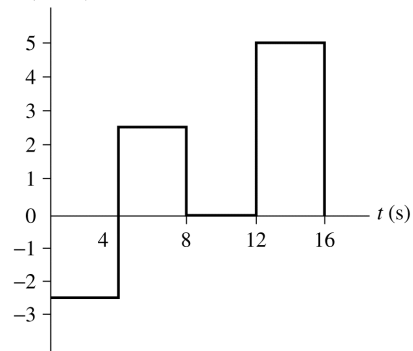


13.3. Model: The wheel is a rotating rigid body.

Solve: (a) α (rad/s²)



The angular acceleration (α) is the slope of the ω -versus- t graph.

(b) The car is at rest at $t = 0$ s. It gradually speeds up for 4 s and then slows down for 4 s. The car is at rest from $t = 8$ s to $t = 12$ s, and then speeds up in the opposite direction for 4 s.