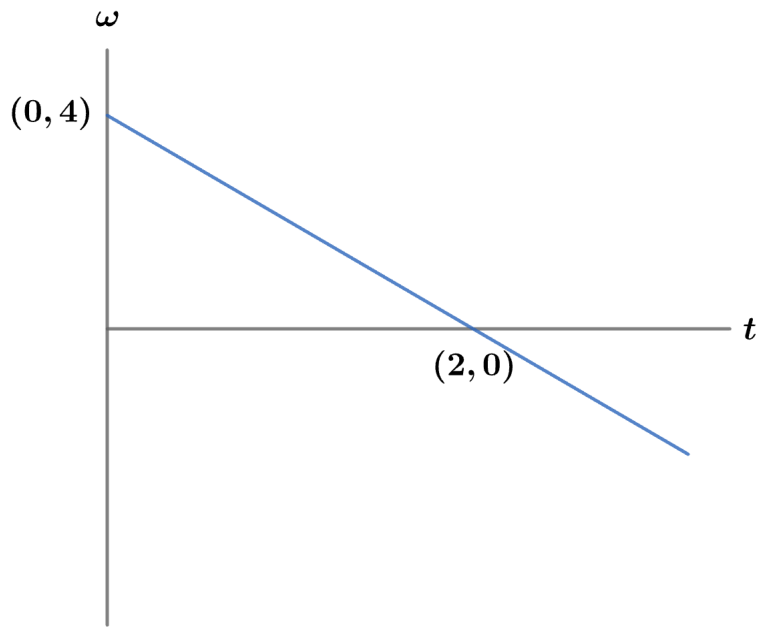


2009 F=ma Exam: Problem 8

Kevin S. Huang



Since angular acceleration α is the time derivative of the angular velocity ω , we can determine α from a ω - t plot by finding the slope.

$$\alpha = \frac{\Delta\omega}{\Delta t} = \frac{0 - 4}{2 - 0} \text{ s}^{-2} = -2 \text{ s}^{-2}$$

so the answer is D.