

Question #72564, Physics / Other

A wheel rotates with constant angular acceleration of 3.5 radians per second square. If the angular speed or velocity of the wheel is 2 radian per second at time =0 ,what angle does the wheel rotate between time =0 and time=2seconds

**Solution**

$$\theta = \omega t + \frac{\alpha t^2}{2} = (2)(2) + \frac{1}{2}(3.5)(2)^2 = 11 \text{ rad.}$$

**Answer: 11 rad.**

**Answer provided by AssignmentExpert.com**