

Module 8: L1 Describing Rotational Motion

meter (m) $\Delta x = x_f - x_i$ $v = \frac{\Delta x}{\Delta t}$ m/s. $\alpha = \frac{\Delta \omega}{\Delta t}$
 $\Delta \theta = \theta_f - \theta_i$ radians (rad) m/s^2 $\omega = \frac{\Delta \theta}{\Delta t}$ $a = \frac{\Delta v}{\Delta t}$ $\frac{180}{\pi}$

$\frac{\pi}{180}$ Multiply rad/s rad/s^2 divide Multiply

$\frac{5\pi}{6}$ the radius (r). 40 rad/s Multiply

the radius (r). 10 rad/s $\frac{3\pi}{2}$

- Linear displacement = measured in
- Angular displacement = measured in
- Linear velocity = measured in
- Angular velocity = measured in
- Linear acceleration = measured in
- Angular acceleration = measured in
- To convert any angular quantity to its corresponding linear quantity
 by
- To convert any linear quantity to its corresponding angular quantity:
 by



Name:

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Topic: M8 – Rotational Motion

- $v=20 \text{ m/s}$ and $r = 2 \text{ m}$ then $\omega =$

- To convert the degree into radian $\rightarrow$ by

- To convert the radian into degree $\rightarrow$ by

- $270^\circ =$

- $150^\circ =$