

### 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: .....

Subject : Physics

Date: 18/9/24    Grade: 10

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

- $270^\circ =$

- $150^\circ =$