

Quiz #7

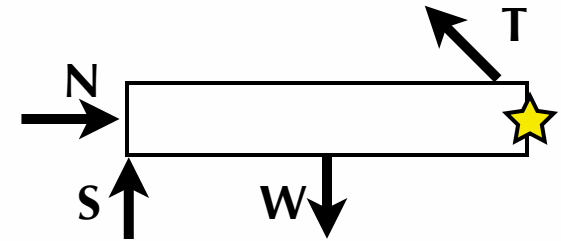
1. If a problem asks "How many times does the wheel go around?" it is asking for

- A) $\Delta\theta$ B) ω C) α

2. The figure shows the forces applied to a stationary rod.

Which force(s) exerts a counterclockwise (\curvearrowright) torque around the pivot (marked with a star)?

- A) N B) S C) T D) W E) T & W



3. The length of an arc of a circle is equal to its radius times its angle, if the angle is measured in

- A) degrees B) radians C) revolutions

4. The frequency f of a rotation is

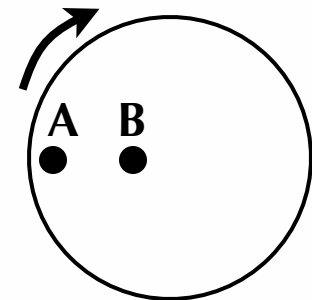
- A) the angular velocity in rev/s B) the angular displacement in degrees
C) the angular velocity in rpm D) the angular acceleration in rev/s^2

5. A wheel has $\omega = -4 \text{ rad/s}$ and an angular acceleration of $\alpha = -3 \text{ rad/s}^2$. The wheel is

- A) slowing down B) speeding up

6. Two points are marked on a spinning wheel. Which of the following is true about the points' linear velocities v and angular velocities ω ?

- A) $v_A = v_B$, $\omega_A > \omega_B$ B) $v_A = v_B$, $\omega_B > \omega_A$
C) $v_A > v_B$, $\omega_A = \omega_B$ D) $v_A < v_B$, $\omega_A = \omega_B$



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ADBABC

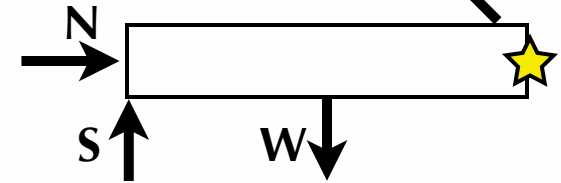
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