Quiz 4 topics

Rotational kinematics: $\theta$, $\omega$, $\alpha$

Units for $\omega$: s$^{-1}$, revs per minute, etc.

Rotation with constant angular acceleration

Connection between rotational and linear quantities: $v=r\omega$, $a_r=r\omega^2$, $a_c=r\alpha$

Moment of inertia: calculation for point masses, use of tables for continuous objects

Rotational kinetic energy $K=\frac{1}{2}I\omega^2$: use in $W'=\Delta K+\Delta U_g$

Polar coordinates: relationship to Cartesian coordinates, curve sketching

Double integrals in polar coordinates: limits of integrations, extra $r$, converting from an integral in Cartesian coordinates