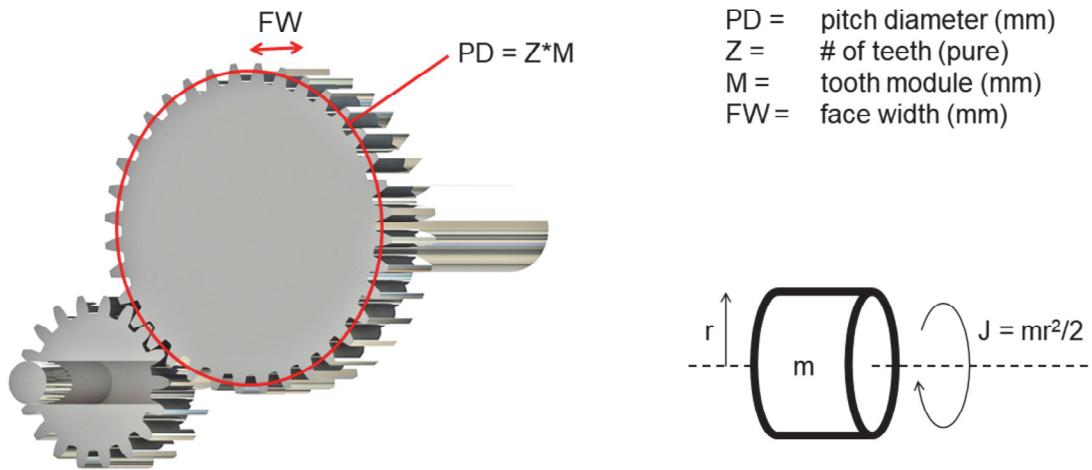


Estimating Gear Inertia (J)



A very good estimate of gear inertia (J) can be computed by treating the gear as though it is a solid disk with a diameter equal to its pitch diameter, since the pitch diameter extends about $\frac{1}{2}$ way up the gear teeth.

The total mass is easily computed using the face width and material density.

The inertia of a solid disk is easily computed using the standard formula from your physics course.