

Homework format

ME 274 – Fall 2021

Please use *white paper* for your homework problem solutions in order to produce better scans.

DUE DATE (month, day, year) **PROBLEM NO.** (H#. #) **PAGE NO.** (# of #) **NAME** (last, first)

Given: A concise statement (in your own words) of the information given.

Find: A concise statement (in your own words) of the information sought.

Solution: **Sketch the system** to be studied. USE A STRAIGHT EDGE for drawing lines. Always draw in the UNIT VECTORS for the coordinate systems that you use in your solution.

For kinetics problems, follow the four-step plan:

1. Draw FBD's
2. Write down the fundamental kinetics equations (Newton/Euler, work/energy, linear impulse/momentum, angular impulse momentum equations)
3. Kinematics
4. Solve

Work the problem symbolically.

At the end convert all quantities to a consistent set of units and substitute into the equations to obtain the answers.

Check your answers for correctness and feasibility.

Check your vector notation and units. In particular, check that you are not equating vector quantities to scalar quantities. It is important that you demonstrate that you know the difference between scalars and vectors. So pay attention to your notation.

Label the answers. _____ ANSWER