Fail bombs!

Here you shall find a list of mistakes/errors that, if I were King of Engineering Education, would instantly result in your not passing ConApps regardless of anything else of which you are capable.

- Application of the ideal gas equation to any liquid or solid → **Fail!**
- Retaining open system terms ($\dot{m}$ terms) in the application of conservation of energy to a closed system → **Fail!**
- Demonstrating that you have no idea what "steady-state" means or when/how to apply the assumption → **Fail!**
- You clearly do not understand the difference between an energy transfer (e.g., $Q_{1\to2}$) an energy transfer *rate* (e.g., $\dot{Q}$). The confusion is equivalent to writing $F = mV$! → **Fail!**
- Writing/reducing conservation or accounting equations that have terms that are dimensionally inconsistent with one another. E.g.,

  $$u_2 - u_1 = Q_{in} - W_{out}$$

  or

  $$dS = \dot{Q}/T_b + \dot{S}_{gen}.$$

- Calculating compression/expansion work as $P(\cancel{V}_2 - \cancel{V}_1)$ when pressure is *not* constant. → **Fail!**