Unit 26. Pre-Class Quiz Questions

1. The momentum balance (or mechanical energy balance) for a PFR is used to account for variations in the
   a. temperature
   b. molar flow rate of species
   c. volumetric flow rate
   d. pressure
   e. heat

2. The transient PFR design equations are
   a. algebraic equations
   b. ordinary differential equations
   c. partial differential equations
   d. eigenvalue equations
   e. integer equations

3. The steady state PRF design equations are
   a. algebraic equations
   b. ordinary differential equations
   c. partial differential equations
   d. eigenvalue equations
   e. integer equations

4. The independent variable in the steady state PFR design equations (as presented in the reading) is
   a. axial position
   b. temperature
   c. pressure
   d. time
   e. molar flow rate

5. The dependent variables in the PFR design equations (as presented in the reading) are (select all that apply)
   a. axial position
   b. temperature
   c. pressure
   d. volumetric flow rate
   e. molar flow rate