Problem Set #2   Chem 471   Fall 1999

Due Friday, 9/24/99, in class.

Show your work. Problem sets will be spot graded. Work must be shown.

$$R = 0.08206 \text{ liter atm K}^{-1} \text{ mole}^{-1} = 8.314 \text{ J K}^{-1} \text{ mole}^{-1}$$

1. Differentiate the following:

    a) $PV = nRT$ P with respect to T

    b) $PV = nRT$ P with respect to V

    c) $z = e^{ax}$ z with respect to x

    d) $q = e^{-Ei/kT}$ q with respect to T

    e) $q = \quad e^{-Ei/kT}$ q with respect to T

2. T,S,&W Ch 2 Pb 12

3. T,S,&W Ch 2 Pb 24

4. T,S,&W Ch 2 Pb 35

5. T,S,&W Ch 3 Pb 9

6. T,S,&W Ch 3 Pb 16

7. T,S,&W Ch 3 Pb 18

Extra - don't turn in - think about the questions posed in Ch 3 Pb 22.