Chapter 4 Homework Assignment P-Chem Math

On separate piece of paper, evaluate each problem given below. Make sure to show all of your work (in other words, don’t use a computer to do the work for you). \textit{11 points total}

Evaluate the Derivative for each of the expressions below.
1. \((3 + 4x^3)^5\)
2. \(\ln\left(x^2e^{-ax^2}\right)\)
3. \(\sin(ax^2 + bx + c)\)
4. \(e^{-4x^3 + 3x^5}\)
5. \(x^2 \ln(ax^2)\)
6. \(\frac{3x^2}{\left(4 + 3x^3\right)^{\frac{1}{2}}}\)

7. Find \(\frac{dn}{dP}\) for \(P + \frac{n^2a}{V^2}(V - nb) = nRT\).