General Chemistry
Mr. MacGillivray
Quiz #31:
Molarity & Dilution

Solve the following problems. Show all work.

1. Another name for a homogeneous mixture is a(n) _____.
2. A solution of two metals is called a(n) _____.
3. A solution in which alcohol is the solvent is called a(n) _____.
4. A solution in which water is the solvent is called a(n) _____ solution.
5. Determine the concentration of a solution in which 1.50 mol of $BaCl_2$ is dissolved in enough water to make 12.0 L of solution.

6. Determine the concentration of a solution in which 1.50 g of $BaCl_2$ is dissolved in enough water to make 12.0 L of solution.

7. A chemistry student needs 50.0 ml of 0.035 M $BaCl_2$ (aq) in order to carry out a lab experiment. However, the only solution available in the lab is 0.100 M $BaCl_2$ (aq). Explain how she would make the dilute solution that is needed for her experiment. Show calcs clearly and use one sentence.