**Dilution Problems Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ # \_\_\_\_\_**

**Problem #1:** If you dilute 175 mL of a 1.6 M solution of LiCl to 1.0 L, determine the new concentration of the solution.

**Solution:**

**Problem #2:** You need to make 10.0 L of 1.2 M KNO3. What molarity would the potassium nitrate solution need to be if you were to use only 2.5 L of it?

**Solution:**

**Problem #3 (CHALLENGE):** To what volume should you dilute 133 mL of a 7.90 M CuCl2 solution so that 51.5 mL of the diluted solution contains 4.49 g CuCl2?

**Solution:**