Molarity Problems

1. What is the molarity of a solution that was prepared by dissolving 14.2 g of $NaNO_3$ (molar mass = 85.0 g/mol) in enough water to make 350 mL of solution?

<u>Ans: 0.477 M</u>

2. What is the molarity of a solution that was prepared by dissolving 82.0 g of $CaCl_2$ (molar mass = 111.1 g/mol) in enough water to make 812 mL of solution?

<u>Ans: 0.909 M</u>

3. What is the molarity of a solution that contains 5.5 g of HCl (molar mass = 36.5 g/mol) dissolved in enough water to make 250 mL of solution?

<u>Ans: 0.60 M</u>

4. How many grams of NaBr (molar mass = 102.9 g/mol) would be needed to prepare 700 ml of 0.230 M NaBr solution?

<u>Ans: 16.6 g NaBr</u>