Quiz 10A

Question 1. Answer the following questions about NaC2H3O2 · 10 H2O (8 points).

1. Name the compound. \_\_sodium acetate decahydrate\_\_\_\_\_
2. Calculate the percent water.

Na: (22.990 g/mol)1 = 22.990 g/mol

C: (12.011 g/mol)2 = 24.022 g/mol

H: (1.008 g/mol)3 = 3.024 g/mol

O: (15.999 g/mol)2 = 31.998 g/mol

H2O: (18.015 g/mol)10 = 180.18 g/mol

= 262.214 g/mol ≈ 262.21 g/mol

Question 2. What is the mass percent of sodium hydroxide in a solution that is made by dissolving 5.15 g NaOH in 49.0 g H2O (5 points)?

Question 3. Calculate the grams of nitric acid in 548 mL of 12 M HNO3 solution (5 points).

Question 4. A solution is made by dissolving 77.6 g of ethylene glycol (C2H6O2) in 226 g of water (10 points).

1. What is the molality of the solution?

1. What is the freezing point of this solution?