**pH and Molarity Calculation Practice**

1) Determine the pH of the following solutions:

a) A 4.5 x 10-3 M HBr solution.

b) A 3.67 x 10-5 M KOH solution.

2) 0.5M of sodium chloride is dissolved to make 0.05 liters of a 3M solution. How many liters of sodium chloride do you need?

3) 0.5 L of sodium chloride added to make 0.05 liters of a 6M solution. What is the molarity of the 0.5 L of sodium chloride.

4) I have two solutions. In the first solution, 1.0M of sodium chloride is dissolved to make 1.0 liters of solution. In the second one, 1.0M of sodium chloride is added to 1.0 liters of water. Is the molarity of each solution the same? Explain your answer.