SOLUTION CONCENTRATION PRACTICE WORKSHEET

1.	What is the molarity of a solution in which 0.45 grams of sodium nitrate are dissolved in 265 mL of solution?
2.	What volume (mL) of a 0.50 M solution of calcium hydroxide contains 25 grams of solute?
3.	How many grams of ammonia are present in 5.0 L of a 0.050 M solution?
4.	How many grams of solute are present in 275 mL of a 12.5% (m/v) solution of methanol?

5.	If 75 mL of water is added to 120 mL of a 0.15 M NaOH solution, what will be the molarity of the final solution?
6.	What volume (L) of $0.05~M$ HCl solution can be prepared by diluting $250~mL$ of $10~M$ HCl?
7.	350 mL of a 1.5 M NaCl solution is heated until the volume is reduced to 250 mL. What is the molarity of this solution?
8.	Calculate the molarity of a solution prepared by dissolving 120 grams of calcium nitrite in 240 mL of solution.

ANSWERS:

- 1) 0.020 M
- 2) 680 mL
- 3) 4.3 g
- 4) 34.4 g
- 5) 0.092 M
- 6) 50 L
- 7) 2.1 M
- 8) 3.8 M