Stoichiometry in Solutions

Remember the mole map:

And the stoich diagram:

Now we can start with the concentration of A and find the mass, particles, concentration or volume of B!

Ex 1. You want to react 25 ml of 0.25 M mercury (II) nitrate with 0.05 M sodium chloride. What volume of NaCl do you need to completely react so there are no excess reactants?

Ex 2. 37 ml of 0.71 M NaOH is reacted with 64 ml of 0.53 M MgI_2. What mass of precipitate will form?

Ex 3. 235 ml of 0.50 M K_2SO_4 reacts with 100 ml of 0.50 M CaI_2. The precipitate is filtered off. What is the concentration of the resulting solution?