

2- molar ratio method:

تأثير تركيز M و تركيز L سياتيا

In this method the concentration of metal ion is held fixed and the concentration of the reagent is increased stepwise. On the graph the absorbance versus moles of reagent added, the intersection of the extrapolated linear segments determines the ratio: moles of reagent / moles of metal.

Procedure:

- 1- Transfer 2 ml of iron solution (V_m) to 8 volumetric flasks 25 ml, and then add to each 0.5 ml of hydroxyl amine hydrochloride solution.
- 2- Add to all flasks in order 2, 3, 4, 5, 6, 7, 8 ml of spectrophotometrically reagent (V_L), then wait for 10 min.
- 3- Add to all flasks 4 ml of sodium acetate solution and complete to the mark by distilled water.
- 4- Blank is 0.5 ml of hydroxyl amine hydrochloride, 5 ml of spectrophotometrically reagent and 4 ml of sodium acetate, then complete to the mark by distilled water.
- 5- Measure the absorbance of all solutions at 508 nm.
- 6- Plot the relationship between Absorbance and the percentage of reagent to metal as shown in figure (2), and then calculate the percentage of reagent to metal.

