

Finding the Ratio of Moles of Reactants in a Chemical Reaction

Preliminary Lab Assignment

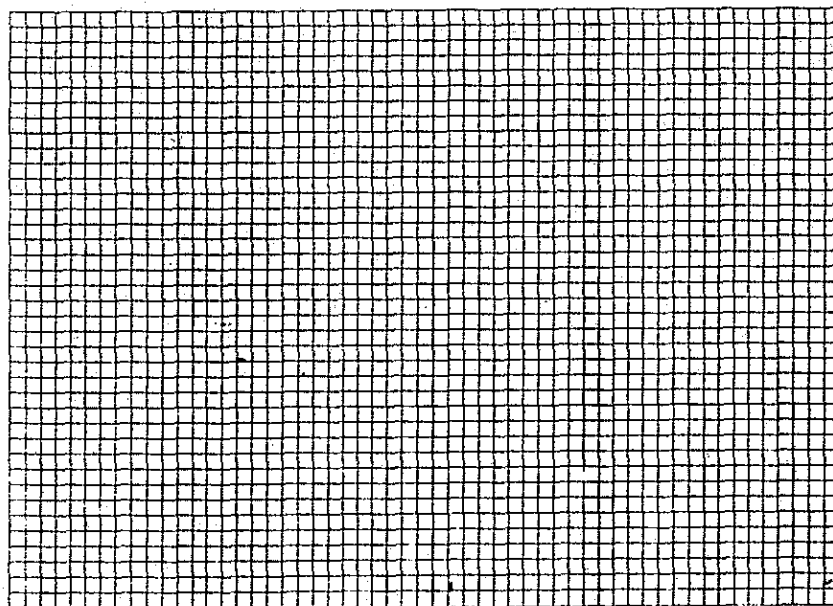
Name _____ Date _____ Class _____

1. The following values were obtained in a continuous variations experiment designed to find the coefficients in the equation for the reaction between 0.5 M solutions of AgNO_3 and K_2CrO_4 . One of the products is a precipitate:

Experiment	mL AgNO_3	mL K_2CrO_4	Grams Precipitate
1	5.0	45.0	1.7
2	15.0	35.0	5.0
3	25.0	25.0	8.3
4	30.0	20.0	10.0
5	35.0	15.0	9.9
6	40.0	10.0	6.6
7	45.0	5.0	3.3

constant volume (amounts add up to 50)

Plot the data as shown in the lab directions. Label axes and space the data so that the graph reflects the precision of the values given. Use a ruler to draw the best-fitting straight lines, and determine the stoichiometry of the reaction.



AgNO_3



2. Are there enough values to make a valid conclusion? Why or why not?