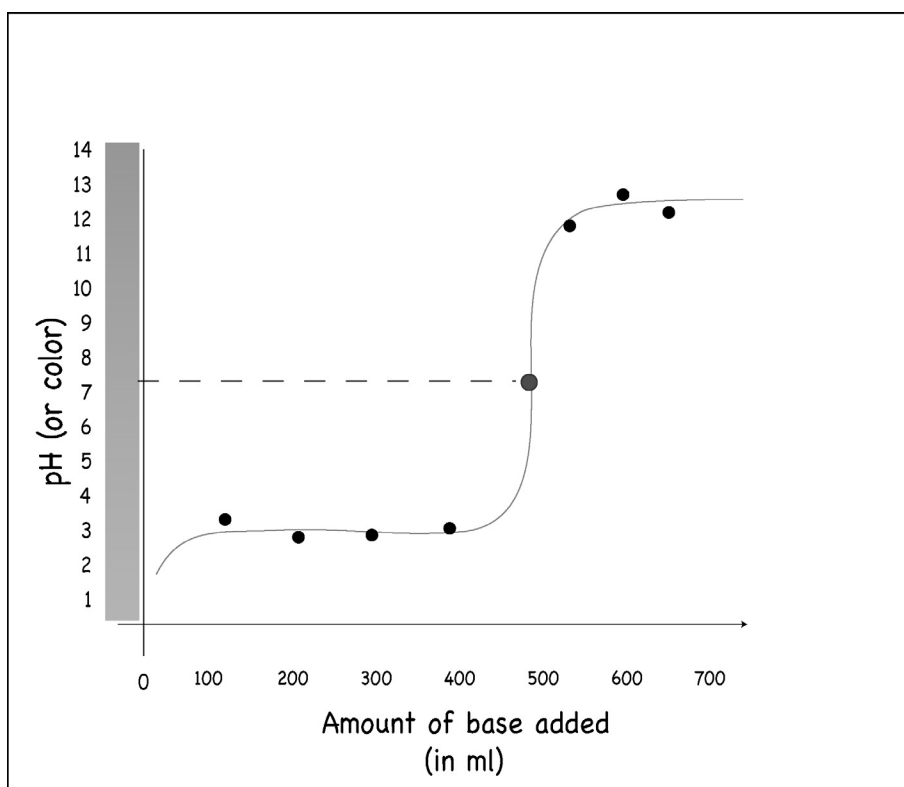
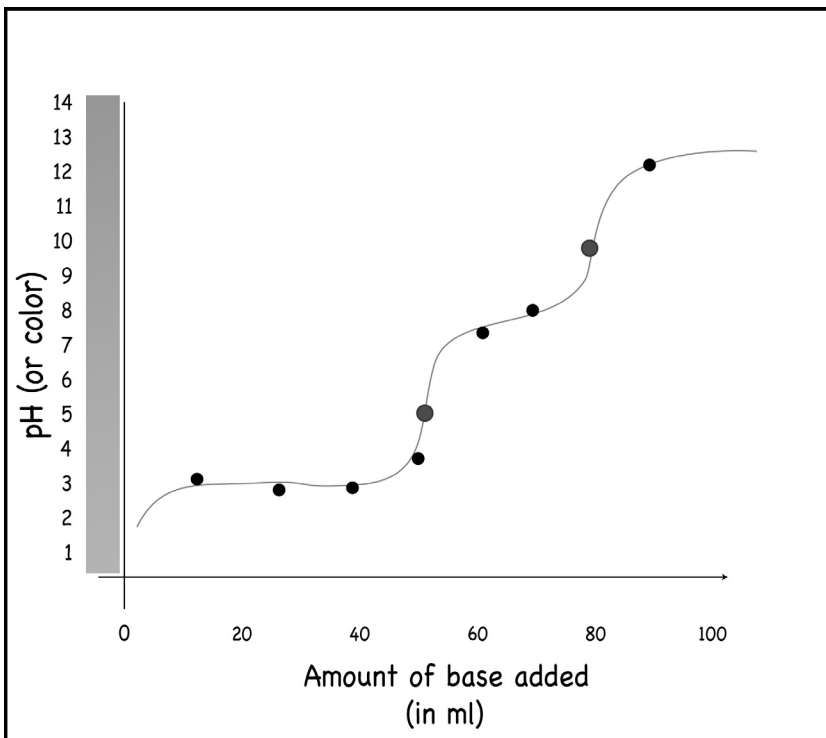


ANSWERS TO STUDY QUESTIONS

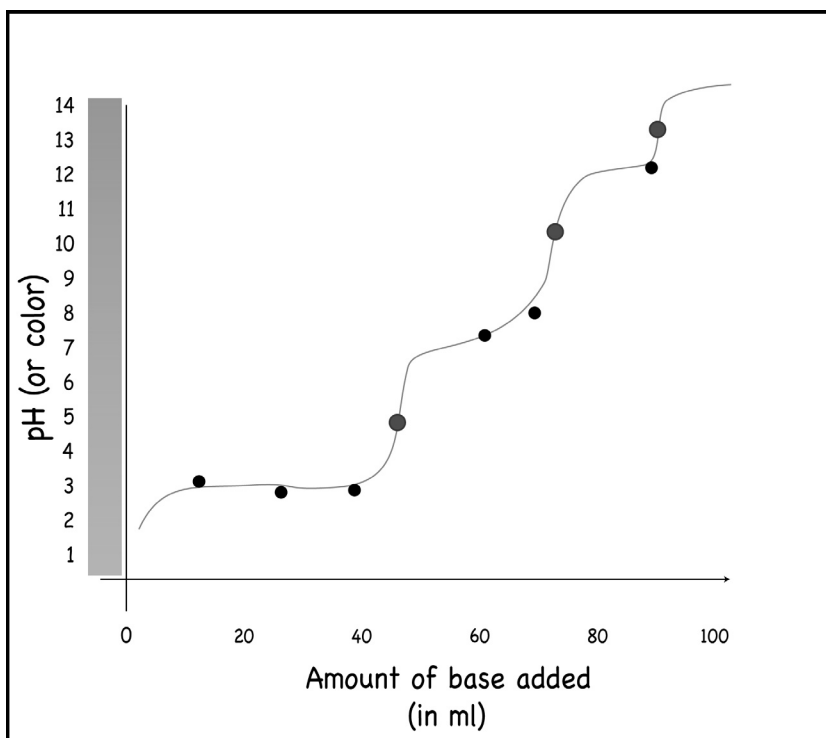
- 6 moles of NaOH?
- Give the molarity of the following solutions: [recall that molarity is moles per liter (the number of moles divided by the number of liters)]
 - 0.5 M [5 moles/10 liters = 0.5 M]
 - 0.25 M [2 moles/8 liters = 0.25 M]
 - 2 M [6 moles/3 liters = 2 M]
 - 5 M [5 moles/1 liter = 5 M]
- 0.2 moles [2 M x 100 ml = 2 M x 0.1 liter = 2 moles/liter x 0.1 liter (liters cancel) = 0.2 moles]
- 0.2 moles. (At the equivalence point the number of moles of base equals the number of moles of acid.)
- a. strong acid and a strong base
- c. strong acid and a weak base
- Titration curve for 500 ml of a 1 M solution of HCl with 1 M NaOH. pH is 7.



8. A general titration curve for H_2SO_4 (a strong acid) with NaOH (a strong base).



9. A general titration curve for H_3PO_4 (a polyprotic acid) titrated with NaOH (a strong base).



10. Draw a general titration curve for NaOH titrated with HCl.

