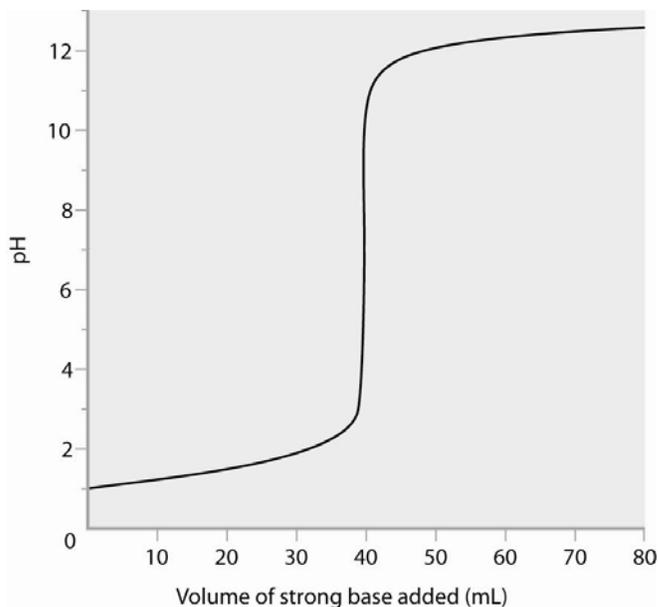


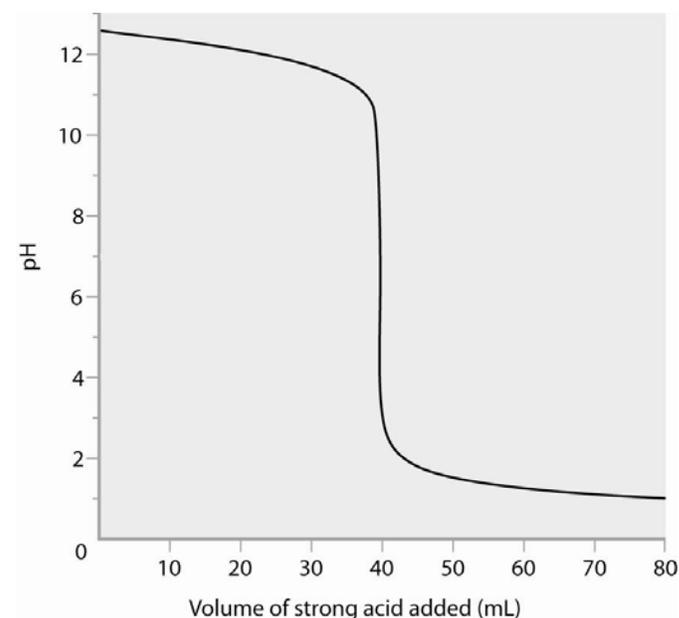
# Selecting an Indicator Answer Key

1.



- (a) Phenol red is an appropriate indicator to use in this titration, since it changes colour between pH 6.6 and pH 8.
- (b) The endpoint in this titration would be approximately 6.6 if phenol red were used as an indicator.
- (c) The equivalence point in this titration is approximately pH 7.
- (d) The indicator would change from yellow to red.

2.



- (a) Chlorophenol red is an appropriate indicator to use in this titration, since it changes colour between pH 6.8 and pH 5.2 .
- (b) The endpoint in this titration would be approximately 6.8 if chlorophenol red were used as an indicator.
- (c) The equivalence point in this titration is approximately 7.
- (d) The indicator would change from red to yellow.

3. Bromocresol green would be a poor indicator to use for either of these titrations because it changes colour between pH 3.8 and pH 5.4, well below the equivalence point for both reactions.