

Competition Corner: Buffer Evidence

g11_u04_w15

Original fictional paper data only; no mixing, titration, pH testing, or procedure is requested.

1. A pair has .060 mol HX and .040 mol X^- , $pK_a = 5.00$. Calculate pH before and after a fictional .030 mol base-model quantity consumes HX. State a capacity limit.
2. Two cards have equal 1:1 ratio but totals .002 mol and .200 mol. Compare pH estimate and capacity; name two claims this model cannot establish.