Question 32 (9 marks)

From a measuring cylinder, 34.0 mL of 0.114 mol L^{-1} nitric acid, HNO_3(aq), is added to a flask containing 44.5 mL of 0.0556 mol L^{-1} solution of calcium hydroxide, $Ca(OH)_2$(aq). Determine the pH of the final solution.