• Calculate the pH of a 0.020 M solution of lactic acid, HC₃H₅O₃, at 25 °C. The pK_a of lactic acid is 3.86.

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pH =

A 1.0 L solution of 0.020 M lactic acid is added to 1.0 L of 0.020 M sodium hydroxide solution. Write the ionic equation for the reaction that occurs.

Is the resulting solution acidic, basic or neutral? Give a reason for your answer.