

19. What can be concluded from the statement $K_w = [\text{H}^+][\text{OH}^-] = 1.0 \times 10^{-14}$ at 25 °C?
- (a) Pure water has a pH of 14.
 - (b) Pure water does not react with acids or bases.
 - (c) The concentration of hydrogen and hydroxide ions is not equal.
 - (d) The concentration of hydrogen ions is $1.0 \times 10^{-7} \text{ mol L}^{-1}$.