CONCEPT: pH Revisited CALCULATIONS 1

EXAMPLE 1: If at 50 ^{o}C the ionization of pure water, K_w, is 7.94×10^{-14} what is the pH of a neutral solution?

a) 7.00

b) 6.55

c) 13.10

d) Since K_w is a constant the number doesn't change.

EXAMPLE 2: What would be the pH of the same pure water when it contains 0.005 M NaBr at 50 ^{o}C?

EXAMPLE 3: Find the pH of a saturated solution of Barium hydroxide, $Ba(OH)_2$ when dissolved in 0.05 $LiNO_2$. The K_{sp} of $Ba(OH)_2$ is 5.0×10^{-3}.