CHEMISTRY 204
Hour Exam II

Useful Information:

- Unless otherwise noted, all solutions referred to on this exam are aqueous solutions at 25°C.
- On this exam, H_3O^+ and H^+ are used interchangeably.

$K_w = [H^+][OH^-] = 1.0 \times 10^{-14}$ at 25°C.

For $ax^2 + bx + c = 0$, $x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

$pH = -\log[H^+]$

$$K_a = \frac{[H^+]^2 - K_w}{[HA]_o - \dfrac{[H^+]^2 - K_w}{[H^+]}}$$