$$pH = pKa - \log \frac{[HA]}{[A^-]}$$

معادلة هندرسون - حلباخ

Henderson – Hasselbalch

$$p_i = -\log[i]$$

$$HA + H_2O \rightleftharpoons H_3O^+ + A^\ominus$$

$$K_a = \frac{[A^-][H_3O^+]}{[HA]}$$

$$\boxed{\frac{HA}{A^\ominus}}$$

$$\gamma = \frac{a \times b}{c}$$

$$b = \gamma / a_c = \gamma \times c_a$$

$$[H_3O^+] = K_a * \frac{[HA]}{[A^-]}$$

$$\lg a \times b = \log a + \log b$$

$$-\log[H_3O^+] = -\log K_a + \left(-\log \frac{[HA]}{[A^-]}\right)$$