

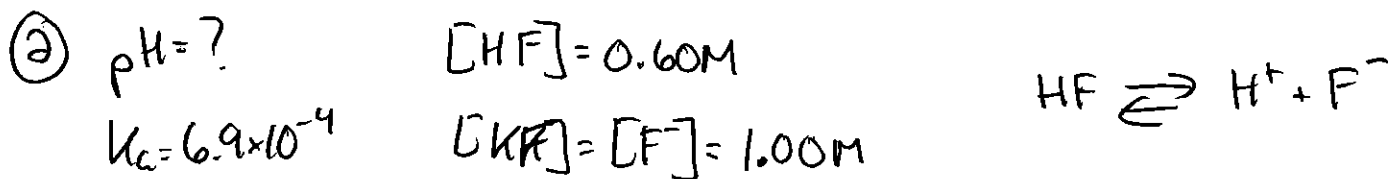
$$K_a = \frac{[\text{H}^+][\text{NO}_2^-]}{[\text{HNO}_2]}$$

$$[\text{H}^+] = K_a \left( \frac{[\text{HNO}_2]}{[\text{NO}_2^-]} \right)$$

$$[\text{H}^+] = (6.0 \times 10^{-4}) \left( \frac{1.0\text{M}}{1.0\text{M}} \right)$$

$$[\text{H}^+] = 6.0 \times 10^{-4}$$

$$\text{pH} = -\log[\text{H}^+] = \boxed{3.22}$$



$$[\text{H}^+] = K_a \left( \frac{[\text{HF}]}{[\text{F}^-]} \right)$$

$$[\text{H}^+] = 6.9 \times 10^{-4} \left( \frac{0.60\text{M}}{1.00\text{M}} \right)$$

$$[\text{H}^+] = 4.14 \times 10^{-4}$$

$$\text{pH} = -\log[\text{H}^+] = \boxed{3.38}$$