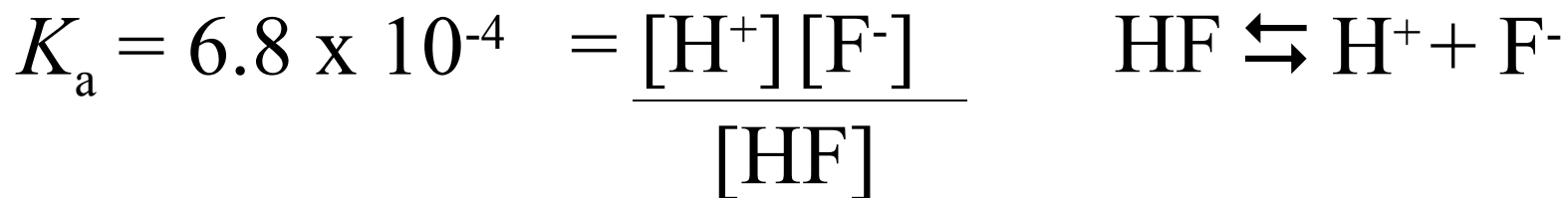


Calculate the pH of a **0.100** M HF solution



	[HF]	[H ⁺]	[F ⁻]	$6.8 \times 10^{-4} = \frac{x^2}{0.100 - x}$
I	0.100	0.00	0.00	
C	-x	+x	+x	$x = [\text{H}^+] = 8.24 \times 10^{-3}$
E	0.100 - x	x	x	pH = 2.08

$$\frac{0.00824}{0.100} \times 100 = 8.25 \% \quad 5\% \text{ assumption not good}$$

.00790 solve quadratic or successive iterations
 .00791
 .00791 $x = 7.91 \times 10^{-3}$ pH = 2.10