## Sample pH problem

What is the pH of $3.5 \times 10^{-3} \mathrm{M} \mathrm{HCl}$ ? $\left(K_{a}>1\right)$

Will $7.5 \times 10^{-4} \mathrm{M} \mathrm{HCl}$ have a higher or lower pH ?

## Sample pH problem

What is the pH of $3.5 \times 10^{-3} \mathrm{M} \mathrm{HCl}$ ?

$$
\begin{gathered}
\left(\mathrm{K}_{\mathrm{a}}>1\right) \\
\mathrm{pH}=-\log _{10}\left(3.5 \times 10^{-3}\right)=2.46 \\
\text { Will } 7.5 \times 10^{-4} \mathrm{M} \mathrm{HCl} \text { have a } \\
\text { higher or lower } \mathrm{pH} ? \\
\text { higher }
\end{gathered}
$$

