Answer on Question \#50372, Chemistry, Other
What is the pH of a solution with a $\left[\mathrm{H}_{3} \mathrm{O}^{+}\right]$concentration of $1.5 \times 10^{-13} \mathrm{M}$ ?

## Solution:

$\left[\mathrm{H}^{+}\right]=\left[\mathrm{H}_{3} \mathrm{O}^{+}\right]=1.5 \times 10^{-13}$

$$
\begin{gathered}
p H=-\log _{10}\left[H^{+}\right] \\
p H=-\log _{10} 1.5 \times 10^{-13}=12.82
\end{gathered}
$$

Answer:
$\mathrm{pH}=12.82$

