# Answer on Question#74150 – Chemistry – Organic chemistry

**Question:**

Suppose a sample of rainwater has a pH of 6.0 and a sample of gastric juice has a pH of 3.0. Which sample is more acidic? Explain why.

**Solution:**

$pH = -lg[H^+]$

$[H^+] = 10^{-pH}$

For rain water $[H^+] = 10^{-pH} = 10^{-6}$ M

For gastric juice $[H^+] = 10^{-pH} = 10^{-3}$ M – more acidic

**Answer:**

The sample of gastric juice is more acidic than the sample of rainwater.