

Correct. Substitute the value  $1 \times 10^{-3}$  in for  $[H^+]$  in the formula and simplify.

$$pH = -\log [1 \times 10^{-3}] = -\log 10^{-3}$$

Use the power property to simplify:  $pH = (-3)(-\log 10)$

$\log 10 = 1$ , so the  $pH = (-3) \cdot (-1) = 3$ .