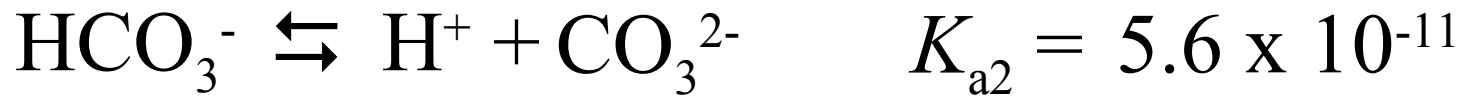


Find the pH of a **0.0037** M solution of H_2CO_3



$$5.6 \times 10^{-11} = \frac{(4.0 \times 10^{-5} + y)(y)}{4.0 \times 10^{-5} - y} \quad y = 5.6 \times 10^{-11} = [\text{CO}_3^{2-}]$$

pH determined by K_{a1}

	$[\text{HCO}_3^-]$	$[\text{H}^+]$	$[\text{CO}_3^{2-}]$	% ionization
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I	4.0×10^{-5}	4.0×10^{-5}	0.00	$1.4 \times 10^{-4} \%$
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C	-y	+y	+y	
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E	$4.0 \times 10^{-5} - y$	$4.0 \times 10^{-5} + y$	y	
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