



1.00 M

$$K_a = 1.8 \times 10^{-5} = \frac{x^2}{1.00 - x}$$

500 mL

$$1.00 - x$$

	[CH <sub>3</sub> COOH]	[CH <sub>3</sub> COO <sup>-</sup> ]	[H <sup>+</sup> ]
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I	1.00	0.00	0.00
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C	-x	+x	+x
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E	1.00 - x	x	x
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$$x = 4.24 \times 10^{-3} = [\text{H}^+]$$

$$\text{pH} = 2.37$$

