

Equivalence Point



1.00 M

mol **acid** = mol **base**

1.00 M

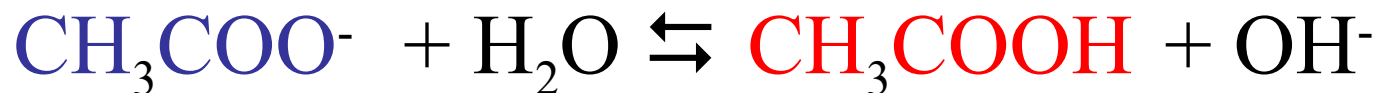
500 mL

$$\frac{1.00 \text{ mol} \times 0.500 \text{ L}}{\text{L}} = 0.500 \text{ mol } \text{acid}$$

$$0.500 \text{ mol } \text{base} \div \frac{1.00 \text{ mol}}{\text{L}} = 0.500 \text{ L } \text{base}$$



$$[\text{CH}_3\text{COO}^-] = \frac{0.500 \text{ mol}}{0.500 + 0.500 \text{ L}} = 0.50 \text{ M}$$



strong conjugate **base**