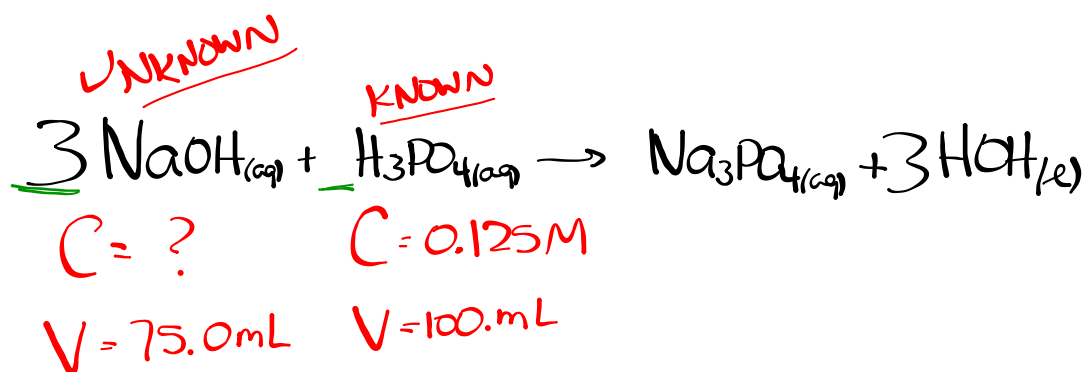


Check Worksheet



Step 1: Moles Known

$$0.100 \text{ L H}_3\text{PO}_4 \times \frac{0.125 \text{ mol H}_3\text{PO}_4}{1 \text{ L H}_3\text{PO}_4} = 0.0125 \text{ mol H}_3\text{PO}_4$$

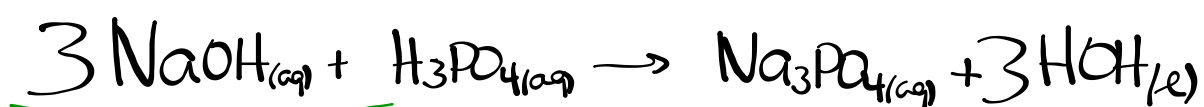
Step 2: Moles Unknown

$$0.0125 \text{ mol H}_3\text{PO}_4 \times \frac{3 \text{ mol NaOH}}{1 \text{ mol H}_3\text{PO}_4} = 0.0375 \text{ mol NaOH}$$

Step 3: Concentration Unknown

$$\frac{0.0375 \text{ mol NaOH}}{0.0750 \text{ L NaOH}} = \boxed{0.500 \text{ M NaOH}}$$

$$0.0375 \text{ mol NaOH} \times \frac{1}{0.0750 \text{ L NaOH}}$$



$$C = ? \cdot 0.15M \quad C = 0.125M$$

$$V = \underline{75.0\text{mL}} \quad V = 100.\text{mL}$$

?

$$0.100\text{L} \cancel{\text{H}_3\text{PO}_4} \times \frac{0.125\text{mol H}_3\text{PO}_4}{1\text{L H}_3\text{PO}_4} \times \frac{3\text{mol NaOH}}{1\text{mol H}_3\text{PO}_4} \times \frac{1}{0.0750\text{L NaOH}} = 0.15\text{ mol}$$

Worksheet

