

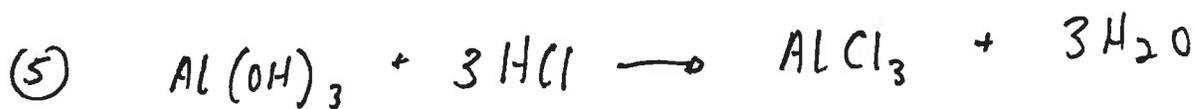
(4) Method 2



$$M_1 V_1 = M_2 V_2$$

$$\overset{\text{NaOH}}{0.355\text{M}} \times 0.100\text{L} = \overset{\text{HCl}}{0.125\text{M}} \times V_2$$

$$\boxed{0.284\text{L} = V_2 \text{ of HCl}}$$



$$M_1 V_1 = M_2 V_2 \quad (\times \text{mole Ratio})$$



$$\left( (0.125\text{M})(100\text{ml}) = (0.125\text{M})(? \text{ml}) \right) \left( \frac{3\text{HCl}}{1\text{Al}(\text{OH})_3} \right)$$

100ml = ml of HCl



$$100\text{ml} \times \frac{3\text{HCl}}{1\text{Al}(\text{OH})_3} =$$

$$\boxed{300\text{ml total of HCl}}$$