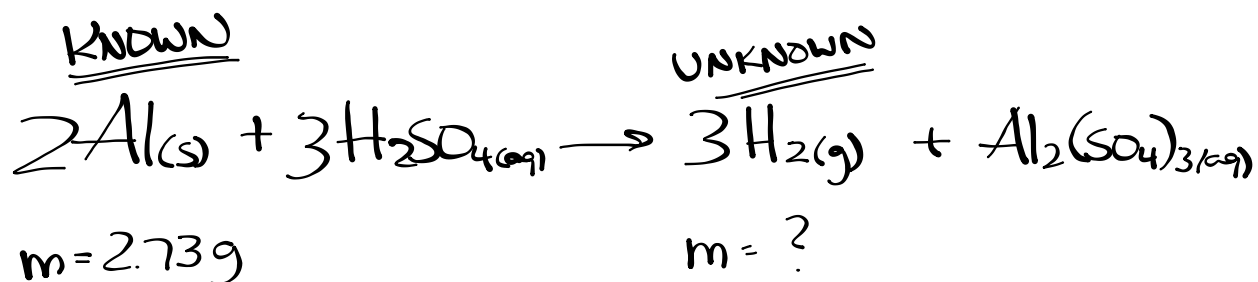


Homework - Worksheet



Step 1: Moles Known

$$2.73\text{g Al} \times \frac{1\text{ mol Al}}{26.98\text{ g Al}} = 0.1012\text{ mol Al}$$

Step 2: Moles Unknown

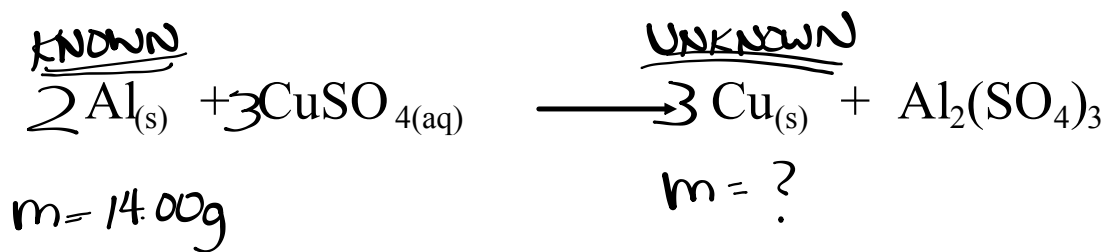
$$0.1012\text{ mol Al} \times \frac{3\text{ mol H}_2}{2\text{ mol Al}} = 0.1518\text{ mol H}_2$$

Step 3: Mass Unknown

$$0.1518\text{ mol H}_2 \times \frac{2.02\text{ g H}_2}{1\text{ mol H}_2} = \boxed{0.307\text{g H}_2}$$

Try This

Find the mass of copper produced if 14.00 g of aluminum reacts with copper (II) sulfate.



$$14.00\text{g Al} \times \frac{1\text{ mol Al}}{26.98\text{g Al}} \times \frac{3\text{ mol Cu}}{2\text{ mol Al}} \times \frac{63.54\text{g Cu}}{1\text{ mol Cu}} = \boxed{49.46\text{g Cu}}$$

Worksheet

