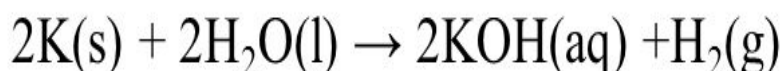


Stoichiometric Calculations: mole-mole

Example: If you put 0.0400 mol of K into water, how much hydrogen gas will be produced?



Mole ratio between K and H_2 is $\frac{2 \text{ mol K}}{1 \text{ mol H}_2}$ or $\frac{1 \text{ mol H}_2}{2 \text{ mol K}}$

moles of known $\times \frac{\text{moles of unknown}}{\text{moles of known}}$

$$0.0400 \text{ mol K} \times \frac{1 \text{ mol H}_2}{2 \text{ mol K}} = 0.0200 \text{ mol H}_2$$