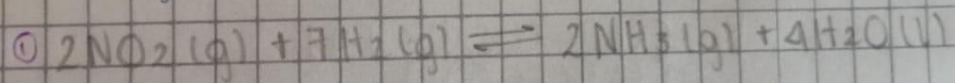
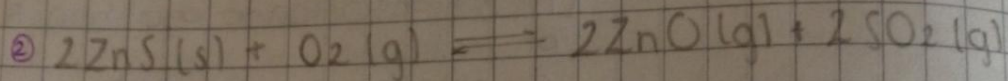


expresar la constante de equilibrio y escribir si es homogénea o heterogénea.



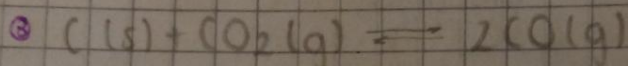
$$K_c = \frac{[\text{NH}_3]^2 \times [\text{H}_2\text{O}]^4}{[\text{NO}_2]^2 \times [\text{H}_2]^7}$$

heterogénea



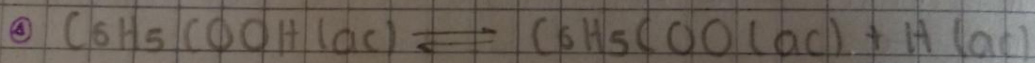
$$K_c = \frac{[\text{ZnO}]^2 \times [\text{SO}_2]^2}{[\text{ZnS}]^2 \times [\text{O}_2]}$$

heterogénea



$$K_c = \frac{[\text{CO}]^2}{[\text{C}] \times [\text{O}_2]}$$

homogénea

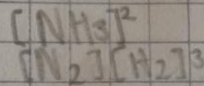


$$K_c = \frac{[\text{C}_6\text{H}_5\text{COO}] \times [\text{H}]}{[\text{C}_6\text{H}_5\text{COOH}]}$$

homogénea

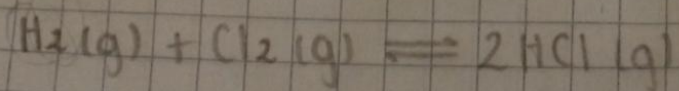
$$K = \frac{[0,15]^2}{[0,921][0,763]^3} = \frac{0,0225}{0,921(0,444)} = 0,0602$$

calcular la constante de equilibrio para la siguiente reacción, si la concentración de nitrógeno es de 3,1 M la de hidrógeno es de 5M y la de amoníaco es de 1,4 M.



$$K = \frac{[1,4]^2}{[3,1][5]^3} = \frac{[1,96]}{[3,1][125]} = \frac{[1,96]}{[387,5]}$$

$$K = 0,005$$



$$\text{H}_2 = 37\text{g} \quad \text{Cl}_2 = 25\text{g} \quad \text{HCl} = 11\text{g} \quad \text{en } 6\text{L}$$

$$\text{H}_2 = \text{H}: 1 \times 2 = 2\text{g/mol}$$

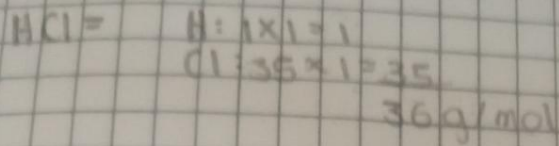
$$\frac{37\text{g}}{2\text{g/mol}} = 18.5\text{m}$$

$$\frac{18.5}{6} = 3.08$$

$$\text{Cl}_2 = \text{Cl}: 35 \times 2 = 70\text{g/mol}$$

$$\frac{25\text{g}}{70\text{g/mol}} = 0.35\text{m}$$

$$\frac{0.35}{6} = 0.058$$



$$\frac{11 \text{ g}}{36 \text{ g/mol}} = 0.30 \text{ m}$$

$$\frac{0.30}{6} = 0.050$$

$$K = \frac{[0.05]^2}{[3.08][0.05]} = \frac{[0.0025]}{[0.154]} = 0.013$$