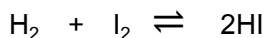
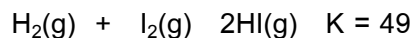


เฉลยข้อสอบ

1. ตอบข้อ **3. 22.2** เหตุผล

วิธีการทำ



มี - - 0.45 mol

ใช้ +X +X -2X

เหลือ +X +X 0.45 - 2X

$$K = \frac{[\text{HI}]^2}{[\text{H}_2][\text{I}_2]} = \frac{\left(\frac{0.45-2X \text{ mol}}{0.5 \text{ L}}\right)^2}{\left(\frac{X}{0.5}\right)\left(\frac{X}{0.5}\right)} = 49$$

$$\frac{\frac{0.45-2X}{0.5}}{\frac{X}{0.5}} = 7$$

$$X = 0.05$$

HI สลายตัว $2X = 2 \times (0.05) = 0.1 \text{ mol}$

$$\% \text{ สลายตัว} = \frac{0.10}{0.45} \times 100 = 22.2$$

2. ตอบข้อ **3. 0.67** เหตุผล

วิธีการทำ

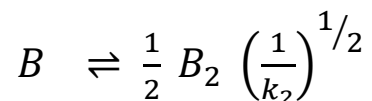
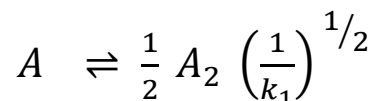
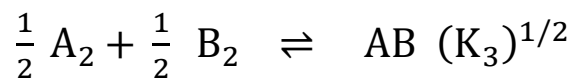
$$K = \frac{[\text{CO}_2]^2}{[\text{CO}]^2 [\text{O}_2]} = \frac{\left(\frac{8 \times 10^{-4}}{10}\right)^2}{\left(\frac{4 \times 10^{-2}}{10}\right)^2 \left(\frac{6 \times 10^{-3}}{10}\right)}$$

$$= \frac{64 \times 10^{-8}}{16 \times 10^{-4} \times 6 \times 10^{-4}}$$

$$= \frac{4}{6} = 0.67$$

3. ตอบข้อ **2.1 x 10²** เหตุผล

วิธีการทำ



$$\begin{aligned} A + B &\rightleftharpoons AB = \left(\frac{K_3}{k_1 \cdot k_2} \right)^{1/2} \\ &= \left(\frac{0.05}{5 \times 10^{-3} \cdot 1 \times 10^{-3}} \right)^{1/2} \\ &= 10^2 \end{aligned}$$