

MUSTAQIL ISHLASH UCHUN MASALALAR YECHIMLARI

1-masala yechimi

$$\begin{aligned}\Delta[A] &= 0.60 - 0.90 = -0.30 \text{ mol} \cdot \text{L}^{-1} \\ \Delta t &= 25 \text{ s}\end{aligned}$$

$$v = -\Delta[A] / \Delta t = 0.30 / 25 = 0.012 \text{ mol} \cdot \text{L}^{-1} \cdot \text{s}^{-1}$$

2-masala yechimi



$$\begin{aligned}v &= -(1/2) \cdot (\Delta[A] / \Delta t) \\ v &= (1/2) \cdot (0.50 / 20) = 0.0125 \text{ mol} \cdot \text{L}^{-1} \cdot \text{s}^{-1}\end{aligned}$$

3-masala yechimi

$$\begin{aligned}\Delta[C] &= +0.25 \text{ mol} \cdot \text{L}^{-1} \\ \Delta t &= 10 \text{ s}\end{aligned}$$

$$v = \Delta[C] / \Delta t = 0.25 / 10 = 0.025 \text{ mol} \cdot \text{L}^{-1} \cdot \text{s}^{-1}$$

4-masala yechimi

$$v \sim C^n$$

$$\begin{aligned}3^n &= 27 \\ n &= 3\end{aligned}$$

Reaksiya 3-tartibli.

5-masala yechimi

30°C → 60°C : 3 bosqich

$$v_{yangi} = v \cdot 2^3 = 8v$$

6-masala yechimi

$$v \sim C^2$$

Agar C 4 marta kamaytirilsa:

$$v_{yangi} / v = (1/4)^2 = 1/16$$

Tezlik 16 marta kamayadi.

7-masala yechimi

$$v = k \cdot C_A \cdot (C_B)^2$$

C_B 2 marta oshirilsa:

$$v_{yangi} / v = 2^2 = 4$$

8-masala yechimi

$$v = k \cdot C$$

$$mol \cdot L^{-1} \cdot s^{-1} = k \cdot (mol \cdot L^{-1})$$

$$k = s^{-1}$$

9-masala yechimi

Kukun holatda moddaning sirt yuzasi oshadi, to'qnashuvlar soni ko'payadi. Shu sababli reaksiya tezligi ortadi.

10-masala yechimi

$C - t$ grafigi to'g'ri chiziq $\rightarrow$ tezlik o'zgarmaydi.

Demak, reaksiya 0-tartibli.