① Zouten van NH_4^+ en Na^+ zijn zeer
goed oplosbaar. → (A)

② X = metaal → geleid stroom

$$2X + Z \rightarrow X_2Z$$

alkali metaal → gas 6-groep
→ $1e^-$ ↳ $6e^-$

(A)
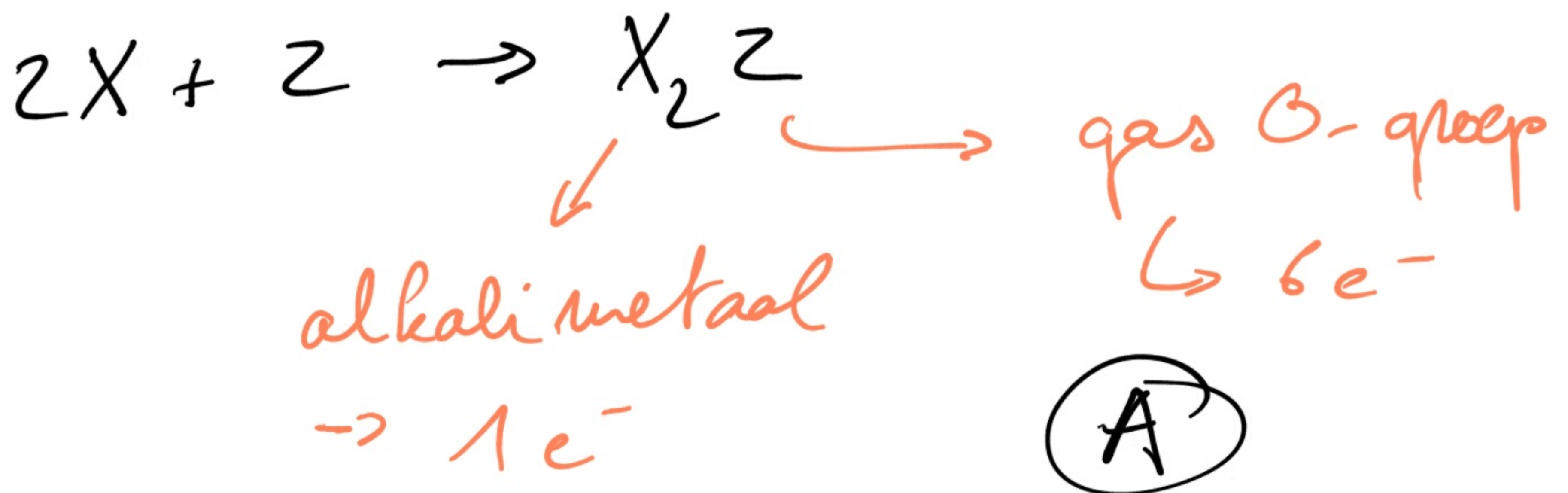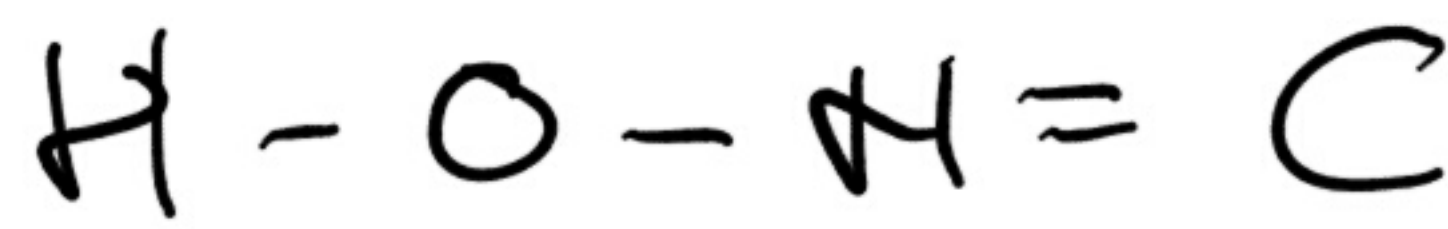
③ H 1
   O 2 $H - O - N = C$
   N 3   ↑
   C 4 $2e^-$ orj!

(C)

④

$NaHCO_3$: $23 + 1 + 12 + 3 \cdot 16 = 84$ g/mol

$\Rightarrow$ 42 g $\rightarrow$ $\dfrac{42 \text{ g}}{84 \text{ g/mol}} = \dfrac{1}{2}$ mol

$\Big\{$ outboede

$\vee$

$26,5$ g over

$\rightarrow$ bereken massa voor elke opl.

A) $2NaHCO_3 \rightarrow Na_2O + 2CO_2 + H_2O$

2 1 gas

$1/2$ $0,25$

$2 \cdot 23 + 16 = 62$ g/mol

$m = 0,25 \cdot 62 = 15,5$ g

B) $2NaHCO_3 \rightarrow Na_2CO_3 + CO_2 + H_2O$

2 1 gas

$1/2$ $0,25$
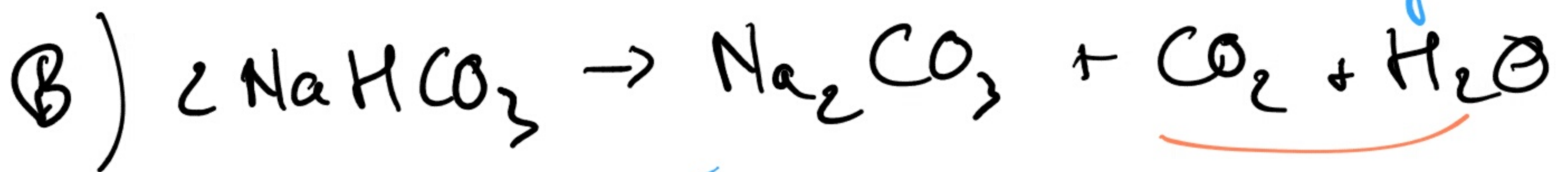
$2 \cdot 23 + 12 + 3 \cdot 16 = 106$ g/mol

$m = 0,25 \cdot 106 = 26,5$ g

$\boxed{B}$

(5) grafiek 15 m% → ρ

? massa KI opgelost in 500 ml
   v/e 15 m% KI oplossing?

⟹ grafiek → 15 m% ⟹ ρ = 1,12 g/ml

$m = ρ \cdot V = 1,12 \cdot 500 = 560 \, g$

⟹ 15 m% — $\frac{15}{100}$ ⟹ $\frac{15}{100} \cdot 560 = 84 \, g$

↳ in de 560 g zit
  15% KI

(C)

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(6) $2 \, NO_2 + Cl_2 \rightarrow 2 \, NO_2Cl$

      2   1   2   mol

$-\frac{\Delta[NO_2]}{\Delta t} = -2 \frac{\Delta[Cl_2]}{\Delta t}$

(D)

⑦ 2 mol X → 600°C → 1 mol X

V = 1 ℓ   ⎣→ $K_c = ?$

A) X ⇌ Y + 2

2   0   0 $K_c = \dfrac{1 \cdot 1}{1} = 1$

1   1   1

B) X ⇌ Y + 2Z

2   0   0 $K_c = \dfrac{1 \cdot 2^2}{1} = 4$

1   1   2

⟨ Ⓑ ⟩

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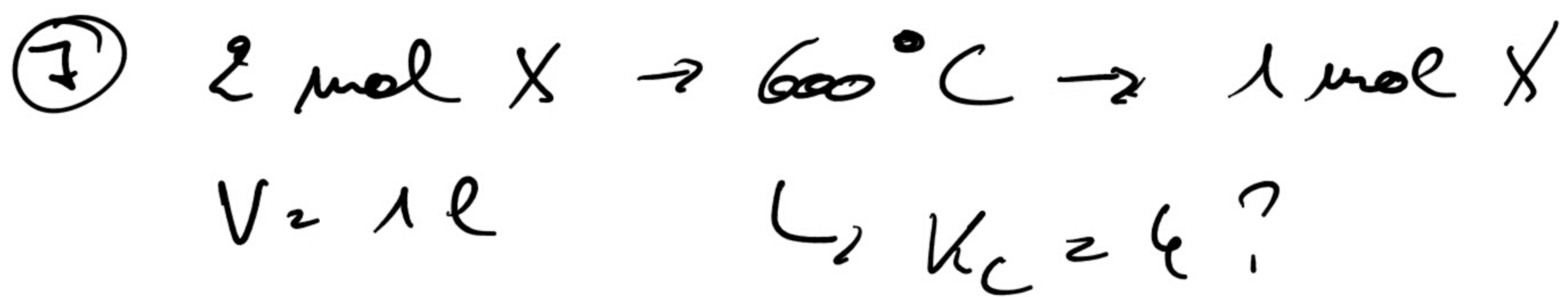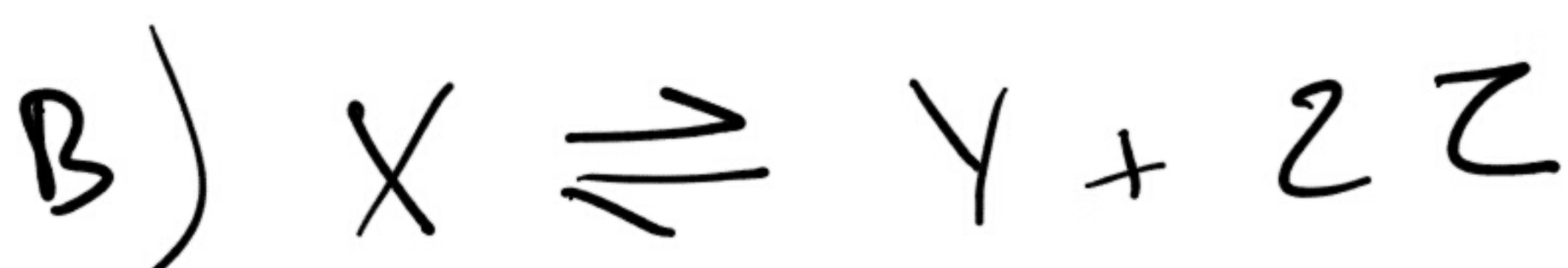
⑧ $n_{HCl} = V \cdot c = 0,1 \ell \cdot 1 \, ^{mol}/_\ell = 0,1 \, mol$

$n_{NaOH} = V \cdot c = 0,1 \ell \cdot 1,5 \, ^{mol}/_\ell = 0,15 \, mol$

⟹ pH=7 → 0,15 − 0,1 = 0,05 mol zur teleört!

ξ | |
neutral   b   2

$V_{HCl} = \dfrac{n}{c} = \dfrac{0,05 \, mol}{2 \, ^{mol}/_\ell} = 0,025 \, \ell$

$= 25 \, m\ell$

⟨ Ⓑ ⟩

(a)

$$SO_3^{2-} + Sn^{2+} + H^+ \rightarrow X + Y + H_2O$$

IV — reductie — S⁰

II — oxidatie — Sn⁴⁺ IV

(A)

_____

(b) (A)   ?