Criopreservació

$[\,] = 3{,}7 \cdot 10^5 \text{ cells/mL}$

$V = 5 \text{ mL}$

$\longrightarrow n^o \text{ cells} = 1{,}85 \cdot 10^6 \text{ cells}$

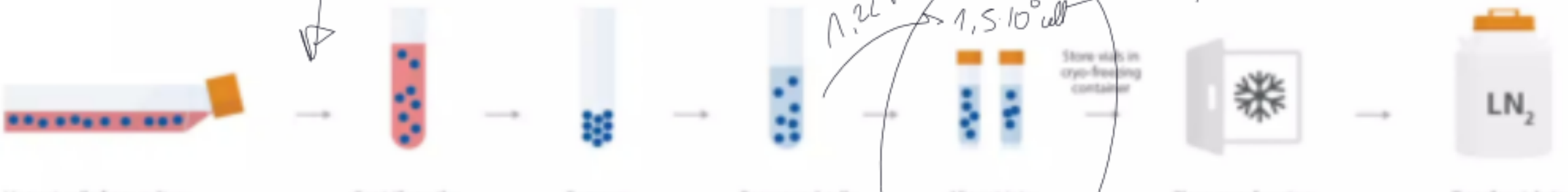
Consisteix en diferents fases de disminució de la Tª de manera concatenada, a una velocitat de -1ºC/min.

Contatge → [ ] cell/mL → nº cells totals → V med congelació

1,5 mL

10^6 cells - $1{,}5 \cdot 10^6$ cells

1,22 mL → $1{,}5 \cdot 10^6$ cell



V = 1,5mL

[ ] =

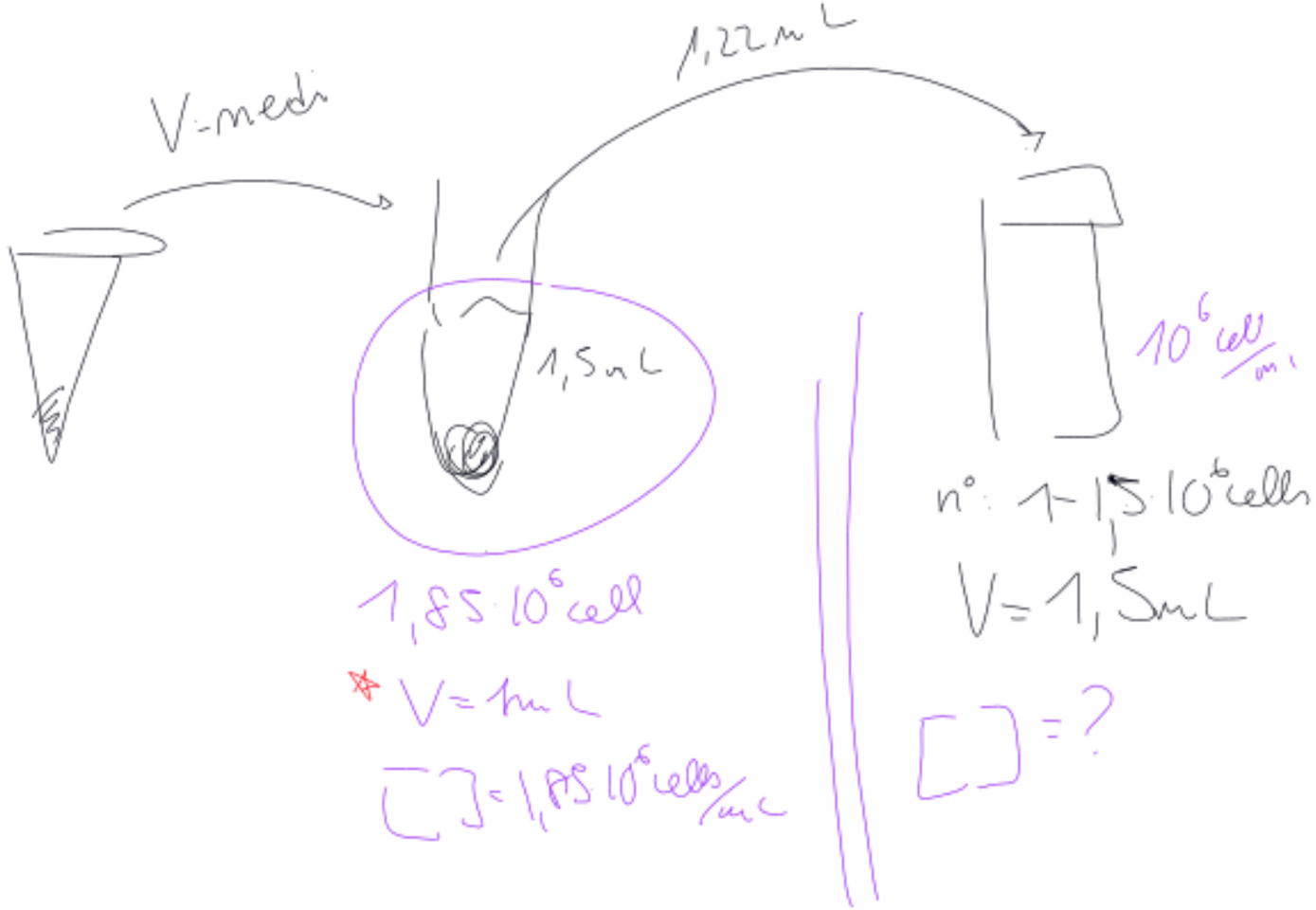
$V = 5\,mL$

$[\,] = 3,7 \cdot 10^5\ cells/mL$

$\Big\}$ $n^\circ\ cells = 1,85 \cdot 10^6\ cells$

$\eta \cdot 10^6\ cells$

$V_i [\,]_i = V_f [\,]_f$



$1,85 \cdot 10^6\ cell$

$* V = 1\,mL$

$[\,] = 1,85\ 10^6\ cells/mL$

$n^\circ = 1,5\ 10^6 cells$

$V = 1,5\,mL$

$[\,] = ?$

$V_i = \dfrac{V_f [\,]_f}{[\,]_i}$

$V_i = \dfrac{1,5\ (1,5 \cdot 10^6)}{1,85 \cdot 10^6} = 1,22$

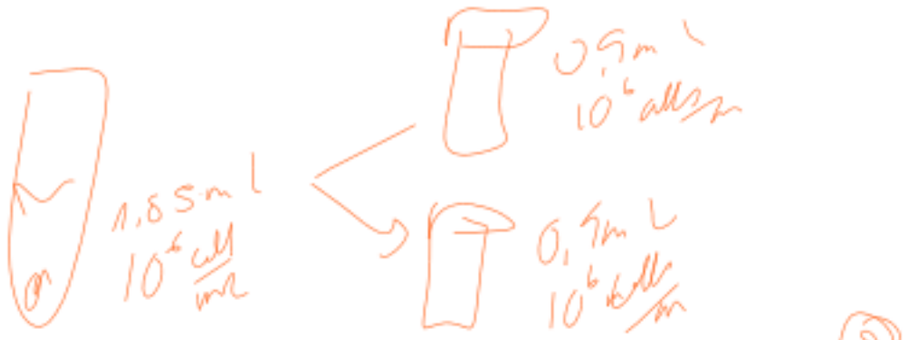
$V_i = \dfrac{1,5 \cdot 10^6}{1,85 \cdot 10^6} = 0,8\,mL$

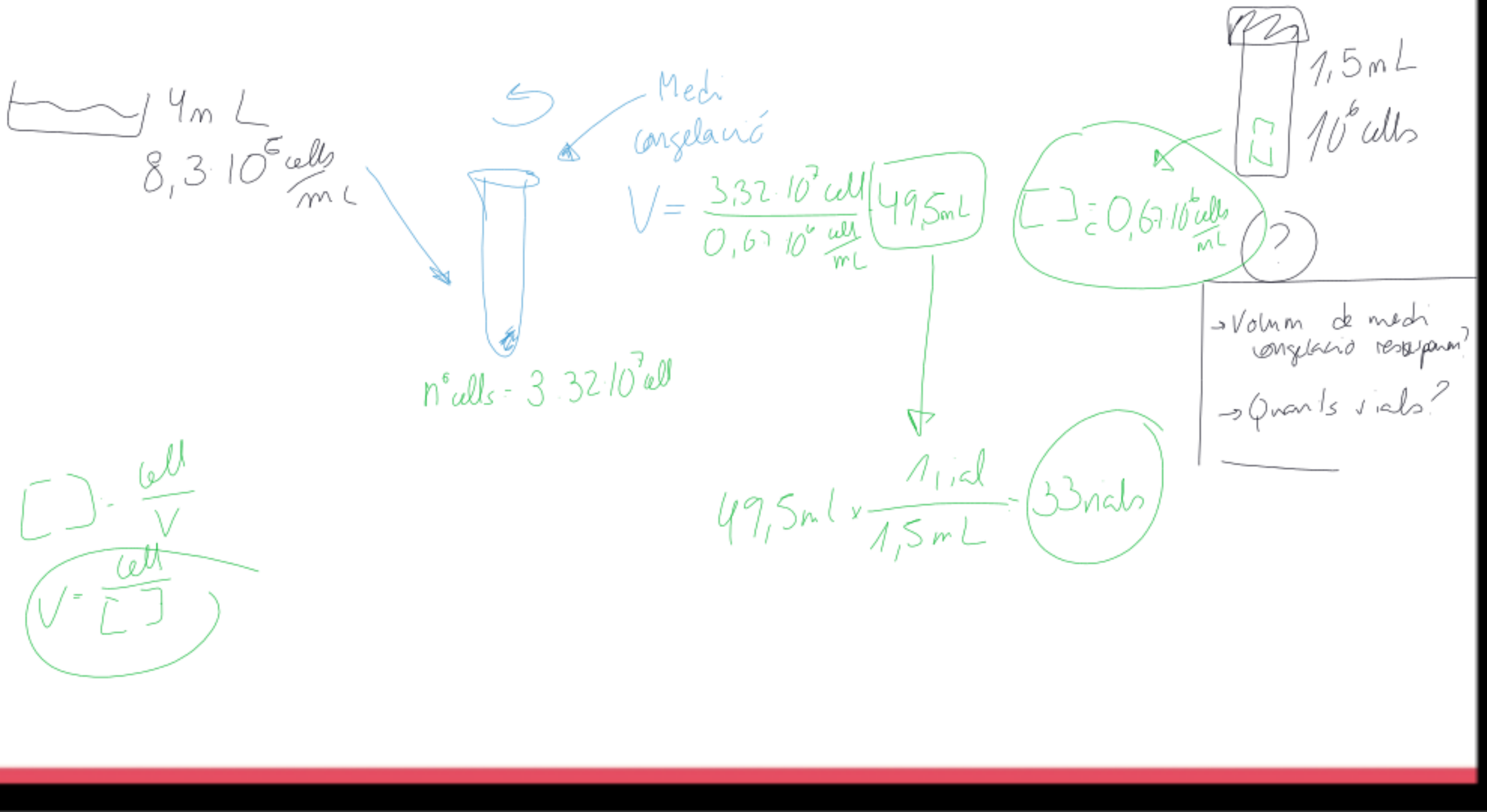
$V_0 = \dfrac{1,5\ (1,5 \cdot 10^6)}{1,85 \cdot 10^6} = 1,22\,mL$

$1,85 \cdot 10^6$ cells

$[\,] = \frac{\text{cells}}{V}$

$V = \frac{\text{cells}}{[\,]} \quad \frac{1,85 \cdot 10^6}{10^6 \text{ cells}} = 1,85 \text{ mL}$




4mL
8,3 10^6 cells/mL
Medi congelació
V = 3,32 10^7 cell / 0,67 10^6 cell/mL
49,5mL
n° cells - 3 32 10^7 cell
1,5mL
10^6 cells
[ ] = 0,67 10^6 cells/mL
?
→ Volum de medi congelació resultant?
→ Quants vials?
49,5mL x 1 vial / 1,5mL = 33 vials
[ ] = cell / V
V = cell / [ ]