



FUNEM - 2020

01)  $PC = \frac{\Delta H}{MM} = \frac{KJ/mol}{g/mol} \rightarrow KJ/g$

MATO  
ETANOL -  
 $\frac{1 kcal}{l} \therefore \frac{R\$}{l}$   
 $\frac{PC}{R\$} =$

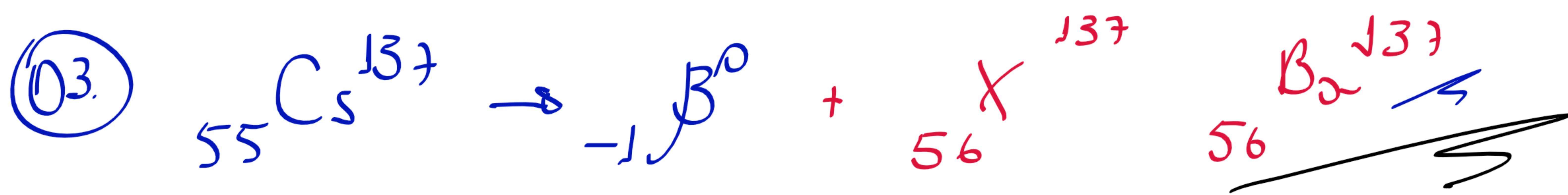
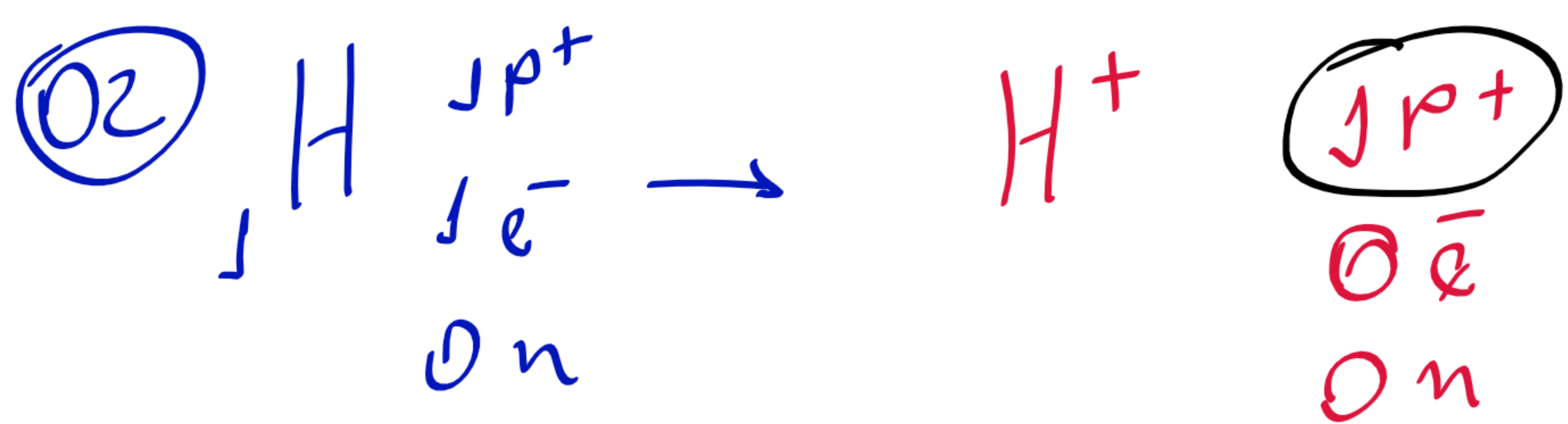
PC.  
ETANOL  
 $\frac{5380 kcal}{l}$   
GASOLINA  
 $8325 kcal/l$

MINAS  
 $\frac{PC}{R\$} =$   
ETANOL  $\frac{5380}{2868} = 1.875,22 KJ/R\$$   
GASOL.  $\frac{8325}{4468} = 1.863,25 KJ/R\$$

$\frac{5380}{2,538} = 2.118,95 KJ/R\$$

GASOLINA  
 $\frac{8325}{4,378} = 1.901,55 KJ/R\$$

$\frac{PC_{ET}}{PC_{GAS}} = \frac{5380}{8325} = 0,646$   
64,6%



$P = 30,2$  ANOS

a)  $t = ?$   
 $m = \frac{m_0}{2^x} \rightarrow \frac{1}{4} = \frac{1}{2^x} \rightarrow 2^x = 4 \rightarrow 2^x = 2^2$   
 $m = \frac{1}{4}$   
 $X = 2$

$m_0 = 1$   
 $P = \frac{t}{X} \rightarrow 30,2 = \frac{t}{2} \rightarrow t = 60,4$  ANOS

