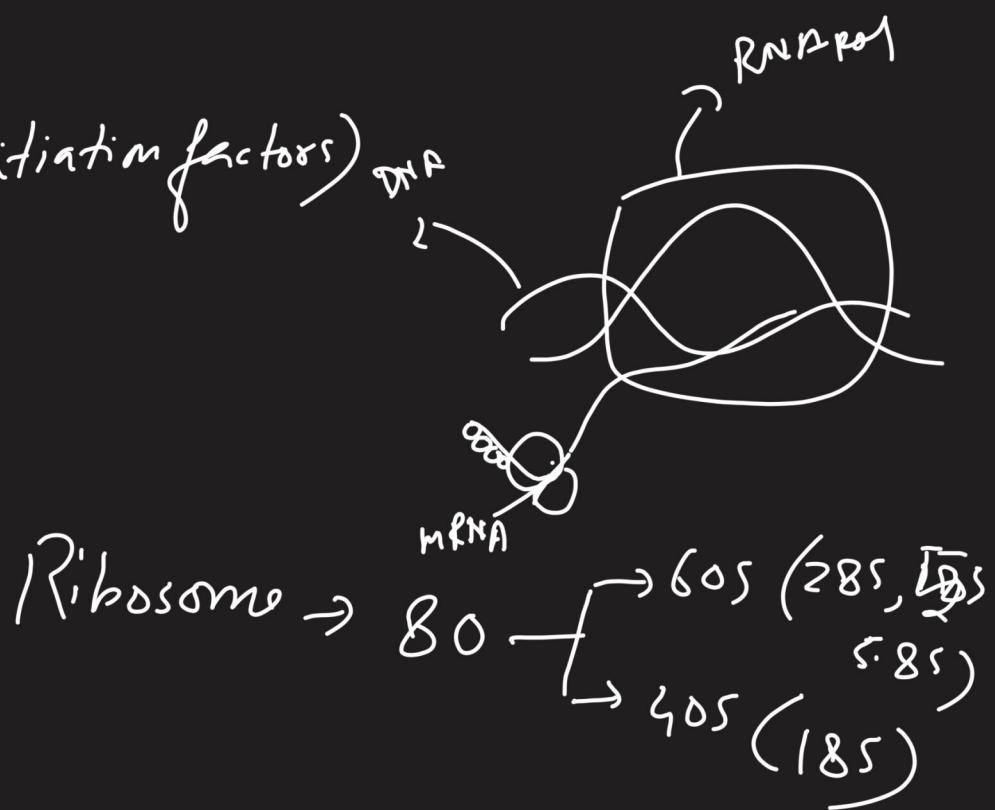
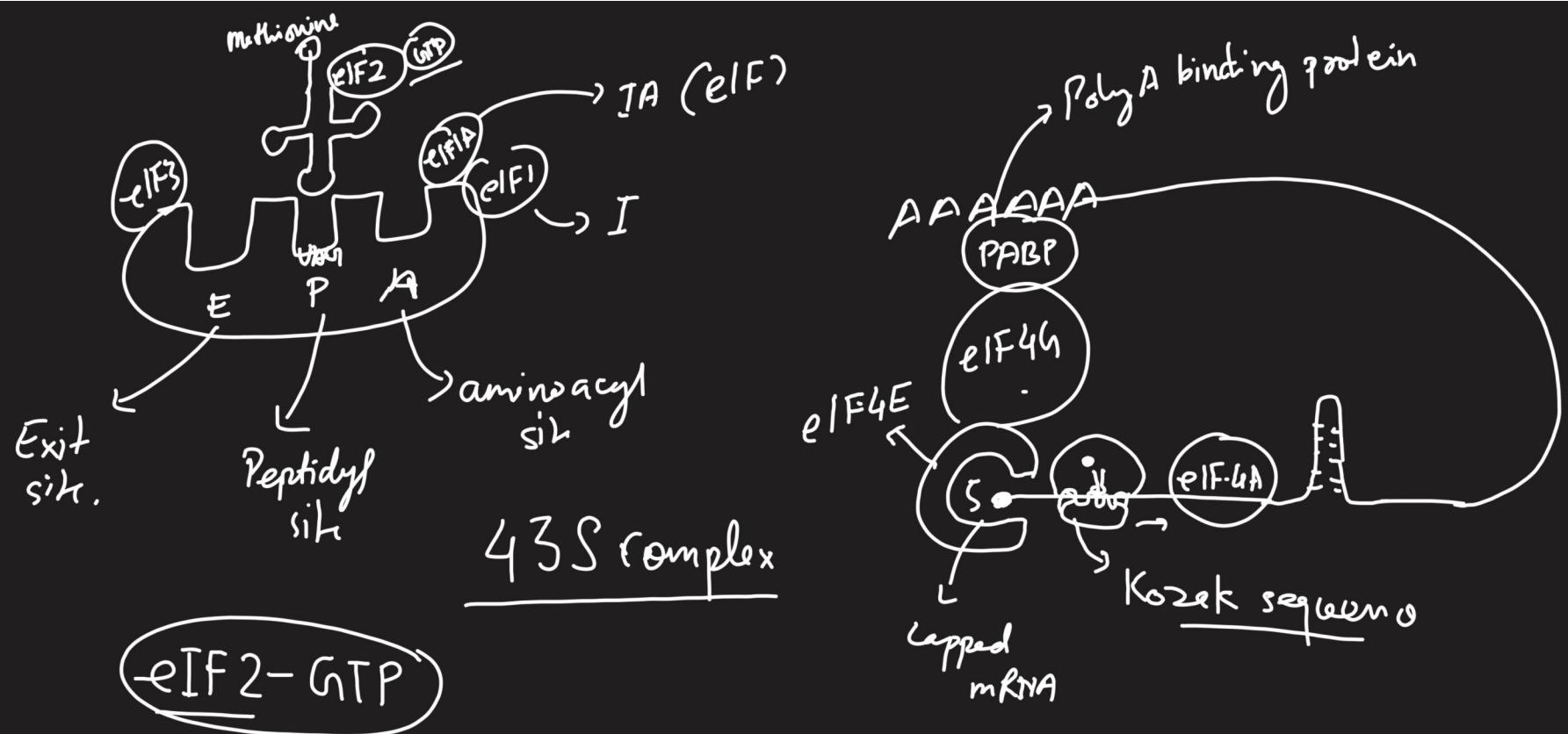


Translation in Eukaryotes

12 initiation factors.

eIF (eukaryotic initiation factors)





43S complex binds to the 5' end of mRNA and scan for UAG.

60S subunit + eIF5B(GTP) → Hydrolysis

Elongation

$e\frac{EF}{EF_1} + \frac{GTP}{eEF_2} \rightarrow$ it will bring the charged t-RNA to A site.

$\left\{ \begin{array}{l} EF-Tu \\ EF-Ts \end{array} \right.$

$\begin{cases} \hookrightarrow \text{Translocation} \\ \hookrightarrow GTP \end{cases}$ binding protein.

$\frac{EF-G}{\hookrightarrow} \text{Translocation}$

$\begin{cases} \downarrow \\ \text{Translocation.} \end{cases}$

Termination

↳ Class I RF → eRF1

Class I { RF - I
RF - II

Class II { RF = III

→ UAA, UAG, UGA
stop codon

One GTP will be utilized for termination.

Q:- How much ATP/GTP will be utilized for the translation of 100 amino acid polypeptide chain? (PPT)