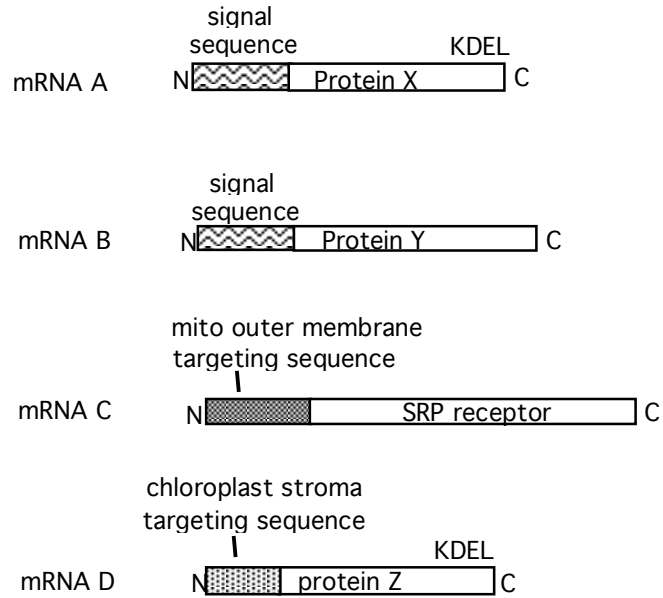


A molecular biologist has generated several mRNAs *in vitro*. The mRNAs encode the protein sequences shown below.



1. If mRNA A is injected into cells, where would you expect to find Protein X located?
  
2. If mRNA B is injected into cells, where would you expect to find Protein Y located?
  
3. If mRNA D is injected into plant cells, where would you expect to find Protein Z located?
  
4. If mRNA D is injected into animal cells, where would you expect to find Protein Z located?
  
5. If mRNA A and mRNA C are simultaneously injected into cells, where would you expect to find Protein X located?