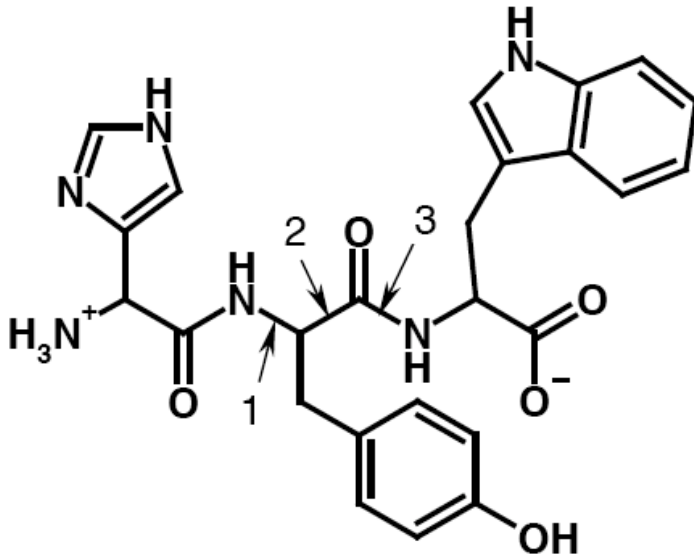


1. Which labeled bond is a peptide bond? 1, 2 or 3?



2. How many amino acid residues does this peptide contain?
3. What is the sequence of this peptide?
4. A solution of this peptide has an absorbance of 0.5 at $\lambda=280\text{nm}$. What is the concentration of the peptide (assume that the pathlength, $l=1\text{cm}$)? The extinction coefficients for the aromatic amino acids are listed below. Assume that λ_{max} for both Trp and Tyr is 280nm.

Trp: $\epsilon_{280} = 5,000 \text{ M}^{-1} \text{ cm}^{-1}$

Tyr: $\epsilon_{274} = 1,500 \text{ M}^{-2} \text{ cm}^{-1}$

Phe: $\epsilon_{257} = 200 \text{ M}^{-1} \text{ cm}^{-1}$

$$A = \epsilon [C] l$$