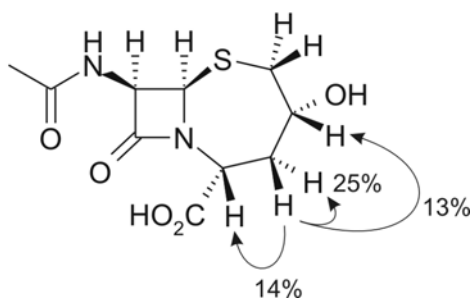
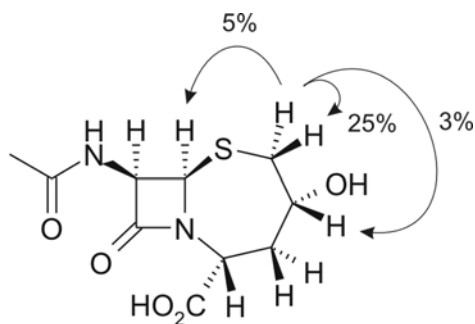


**In-Class Exercise Solutions:
Spatial Relationships and 1D NOE**

a. Top experiment:



Bottom experiment:



(The percentages correspond to relative intensities of the difference peaks; you weren't given this information, but the numbers do match the intensities you see on the difference spectra.)

- b. Both experiments show some NOE enhancement of the H₃ signal, but the top experiment shows much more. That suggests that H₃ is spatially closer to H_{4b} than it is to H_{2a}, and thus that it is above the plane of the ring.