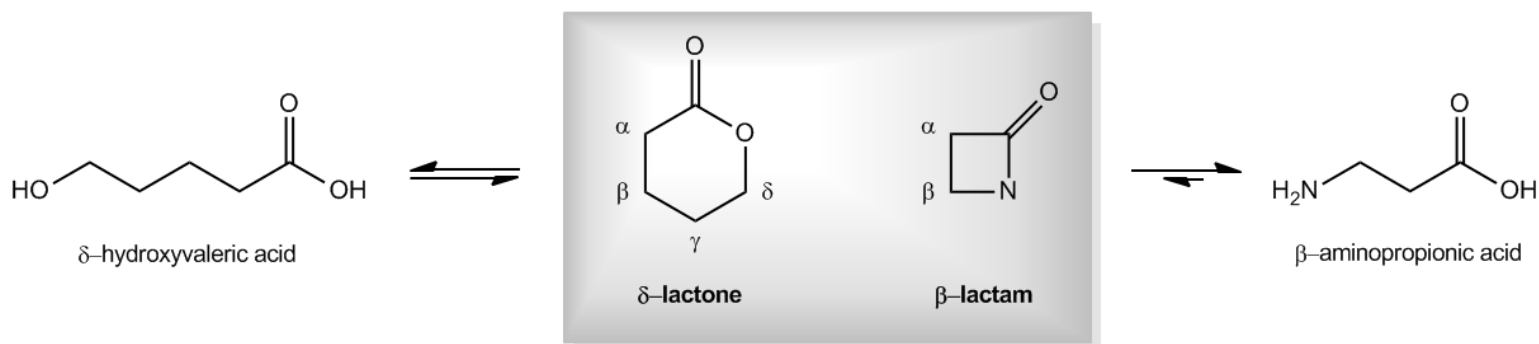


## CONCEPT: LACTONES, LACTAMS AND CYCLIZATION REACTIONS

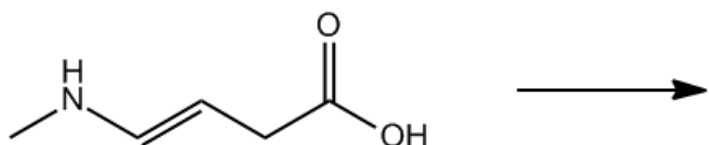
Hydroxycarboxylic acids and aminocarboxylic acids can be made to cyclize, forming lactones and lactams, respectively.

- 5 and 6-membered rings can cyclize *spontaneously*

### Lactones and Lactams:



**EXAMPLE:** Provide the correct structure for the following cyclization reaction and name the new functional group.



### Formation of cyclic anhydrides and imides:

