

Ácidos Carboxílicos e Derivados

Gabriel Braun



Nível 1

4L.01

Ordene os compostos a seguir em função de sua acidez.

- ácido 2,4-diclorobutírico, ácido 2,3-diclorobutírico, ácido 3,4-diclorobutírico.
- ácido 3-bromopropiônico, ácido 2,2-dibromopropiônico, ácido 3,3-dibromopropiônico.

4L.02

Proponha uma rota de síntese para as seguintes transformações.

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4L.03

Proponha uma rota de síntese para as seguintes transformações.

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4L.04

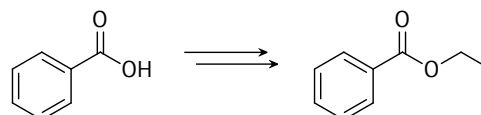
Considere as transformações a seguir.

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Apresente a estrutura dos compostos A-E.

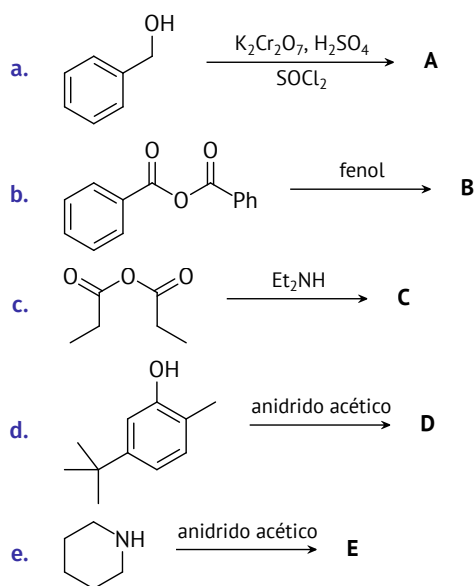
4L.05

Proponha três rotas de síntese para a seguinte transformação.



4L.06

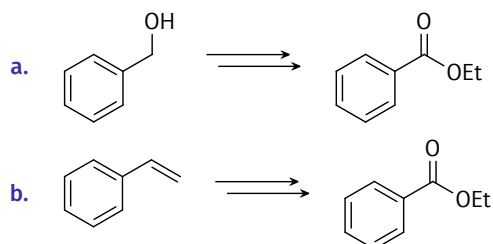
Considere as transformações a seguir.



Apresente a estrutura dos compostos A–E.

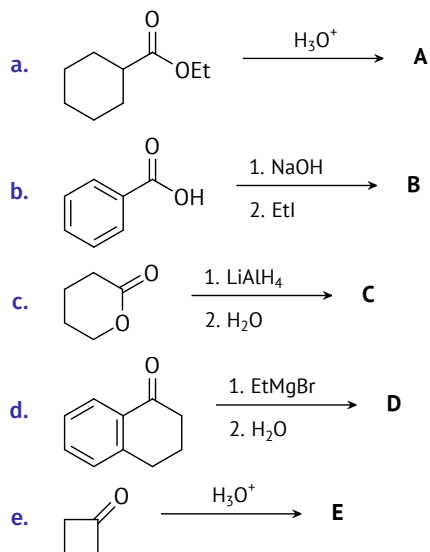
4L.07

Proponha uma rota de síntese para as seguintes transformações.



4L.08

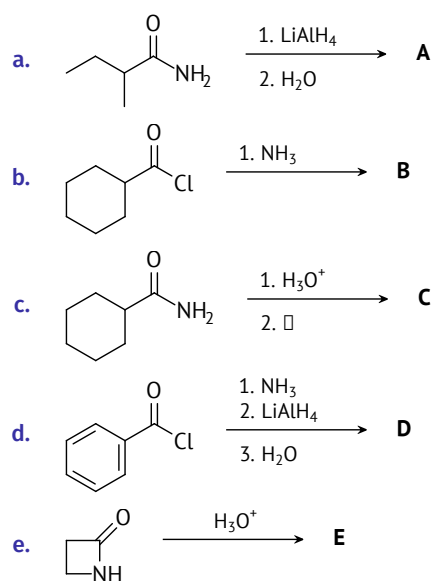
Considere as transformações a seguir.



Apresente a estrutura dos compostos A–E.

4L.09

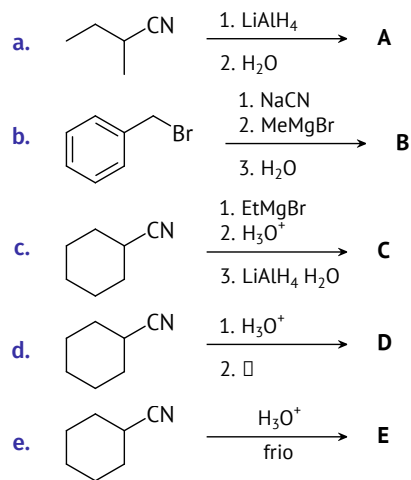
Considere as transformações a seguir.



Apresente a estrutura dos compostos A–E.

4L.10

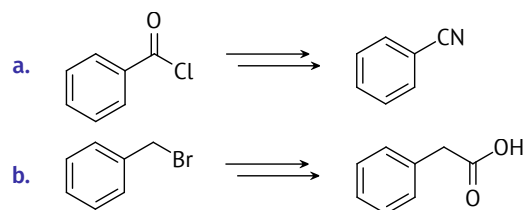
Considere as transformações a seguir.



Apresente a estrutura dos compostos A–E.

4L.11

Proponha uma rota de síntese para as seguintes transformações.


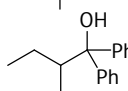
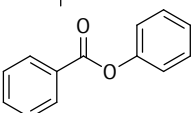
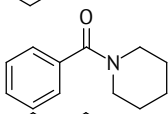
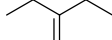


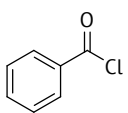
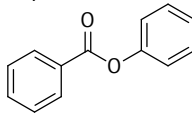
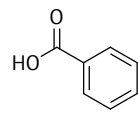
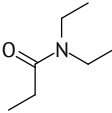
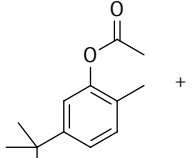

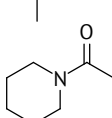
Gabarito: Nível 1

- 4L.01** a. ácido 3,4-diclorobutírico < ácido 2,4-diclorobutírico < ácido 2,3-diclorobutírico
 b. ácido 3-bromopropiônico < ácido 3,3-dibromopropiônico < ácido 2,2-dibromopropiônico

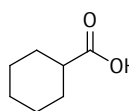
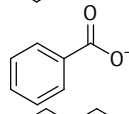
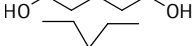
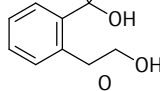
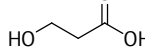
- 4L.02** a. $K_2Cr_2O_7, H_2SO_4$
 b. $KMnO_4, H_2SO_4, \Delta$
 c. 1. $CH_3Cl, AlCl_3$ 2. $K_2Cr_2O_7, H_2SO_4$
 d. 1. $NaCN$ 2. H_3O^+ (ou 1. Mg 2. CO_2 3. H_3O^+)
 e. 1. $NaCN$ 2. H_3O^+ (ou 1. Mg 2. CO_2 3. H_3O^+)

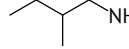
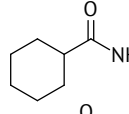
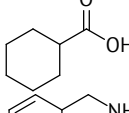
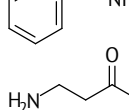
- 4L.03** a. 1. Mg 2. CO_2 3. H_3O^+ 4. $LiAlH_4$ 5. H_2O
 b. 1. $K_2Cr_2O_7, H_2SO_4$ 2. $LiAlH_4$ 3. H_2O

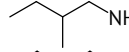
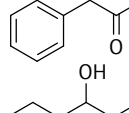
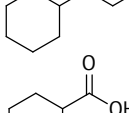
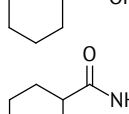
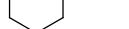
- 4L.04** a. 
 b. 
 c. 
 d. 
 e. 

- 4L.06** a. 
 b.  + 
 c. 
 d.  + 
 e. 

- 4L.07** a. 1. $K_2Cr_2O_7, H_2SO_4$ 2. $SOCl_2$ 3. $EtOH$
 b. 1. $K_2Cr_2O_7, H_2SO_4$ 2. $SOCl_2$ 3. $EtOH$

- 4L.08** a.  + $EtOH$
 b.  + $EtOH$
 c. 
 d. 
 e. 

- 4L.09** a. 
 b. 
 c. 
 d. 
 e.

- 4L.10** a. 
 b. 
 c. 
 d. 
 e. 

- 4L.11** a. 1. NH_3 2. $SOCl_2$
 b. 1. $NaCN$ 2. H_3O^+