

1) In una reazione SN2:

a) Mettere in ordine di reattività crescente i seguenti substrati:

ioduro di metile, bromuro di metile, bromocicloesano, 2-metilbromocicloesano

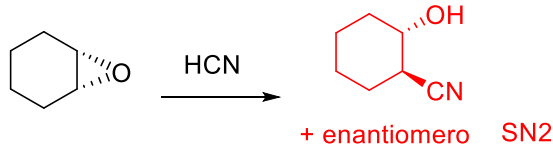
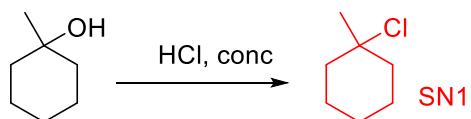
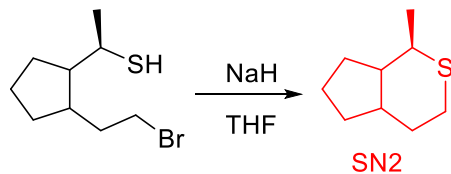
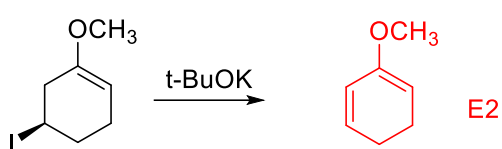
2-metilbromocicloesano, bromocicloesano, bromuro di metile, ioduro di metile

b) Mettere in ordine di reattività crescente i seguenti nucleofili:

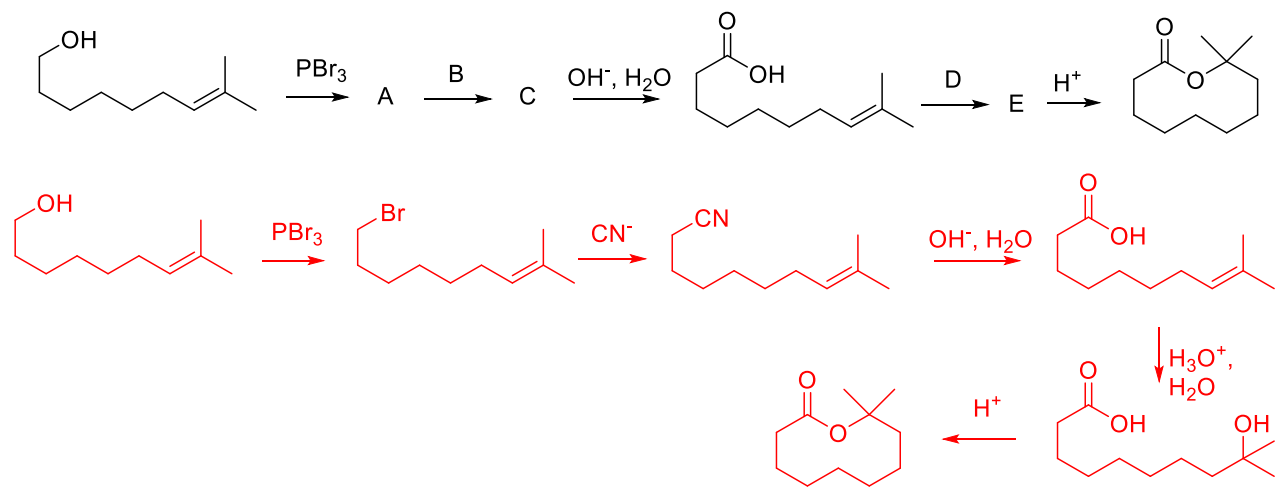
acqua, metossido di sodio, acetato di sodio, Na₂S

acqua, acetato di sodio, metossido di sodio, Na₂S

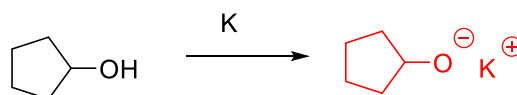
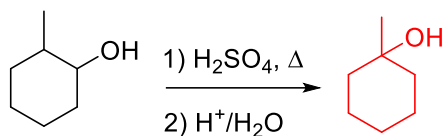
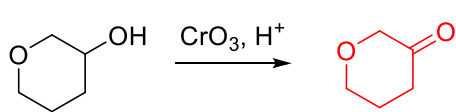
2) Scrivere i prodotti delle seguenti reazioni indicando anche la loro stereochimica, se rilevante, e il tipo di meccanismo con cui avviene la reazione.



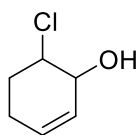
3) Individuare le strutture dei composti e dei reagenti indicati con le lettere:



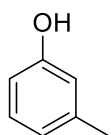
4) Scrivere i prodotti delle seguenti reazioni indicando anche la loro stereochimica, se rilevante.



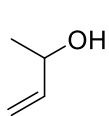
5) Mettere in ordine di acidità crescente i seguenti composti:



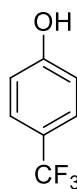
1



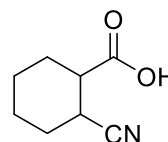
2



3



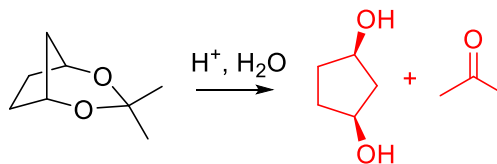
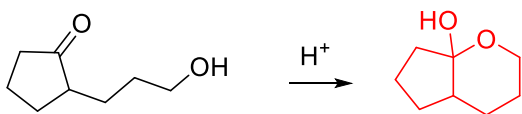
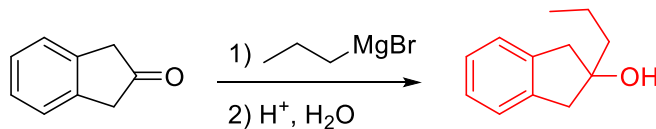
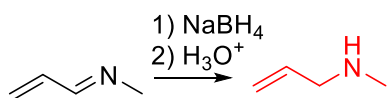
4



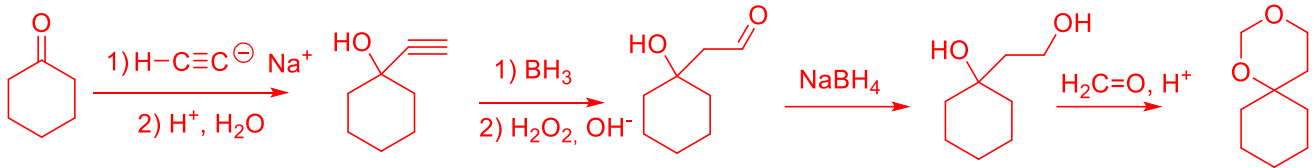
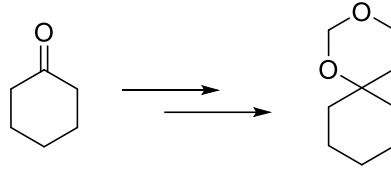
5

$3 < 1 < 2 < 4 < 5$

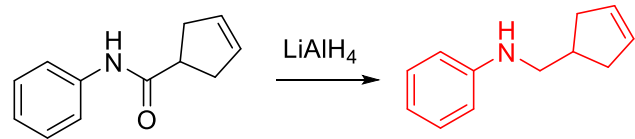
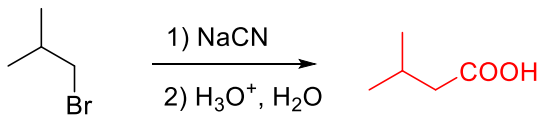
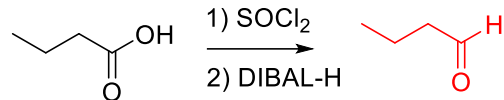
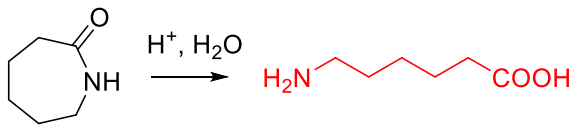
6) Scrivere i prodotti delle seguenti reazioni



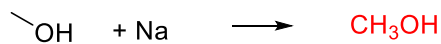
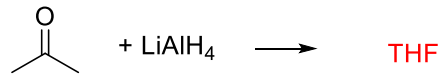
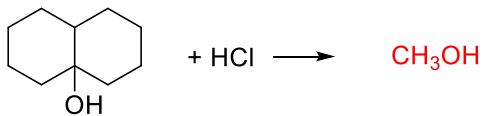
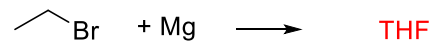
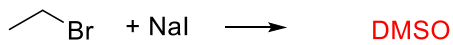
7) Proporre una sequenza di reazioni per eseguire la seguente trasformazione



8) Scrivere i prodotti delle seguenti reazioni



9) Tra i seguenti solventi: dimetilsolfossido, tetraidrofurano, metanolo scegliere il più adatto per le reazioni indicate.



10. Scrivere il meccanismo della esterificazione di Fischer.