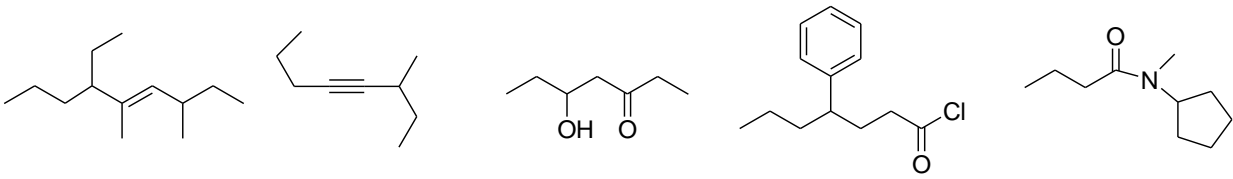
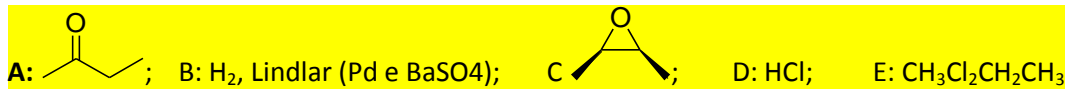
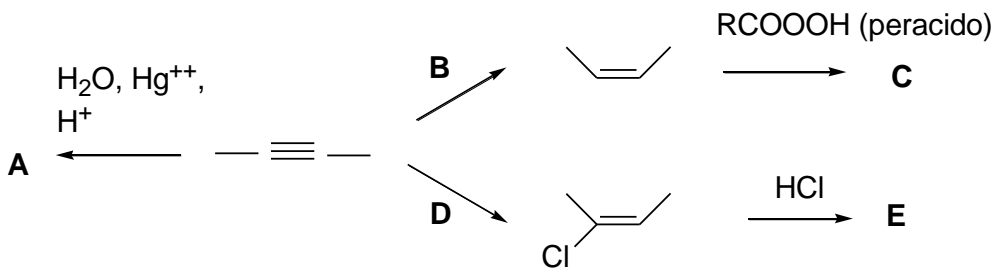


1. Assegnare i nomi IUPAC:

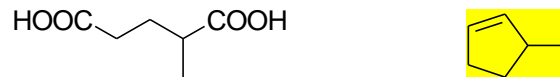


a) E-6-etil-3,5-dimetil-4-nonene b) 3-metil-4-ottino c) 5-idrossi-3-eptanone d) 4-fenileptanoilcloruro e) N-ciclopentil-N-metilbutanamide

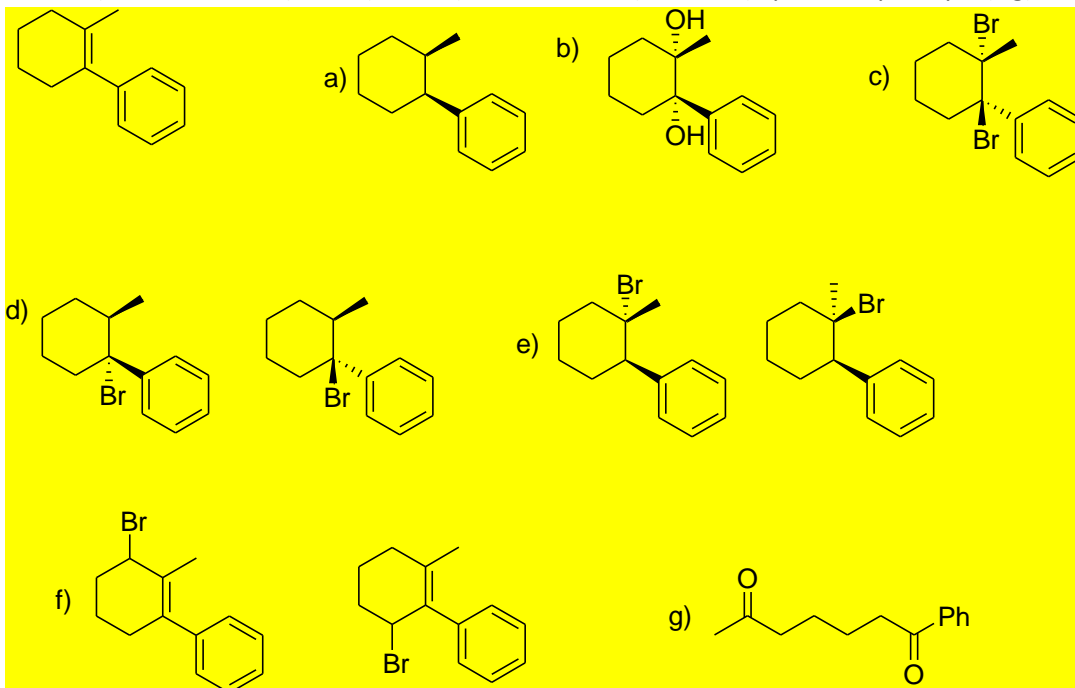
2. Completare le seguenti reazioni:



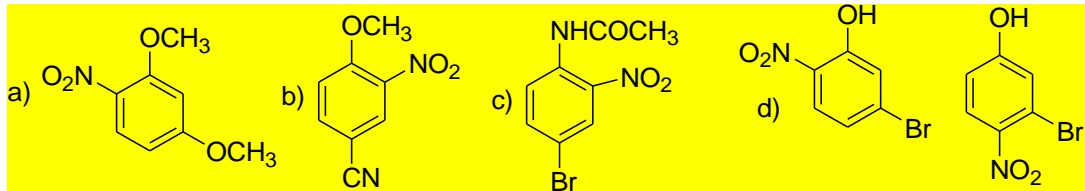
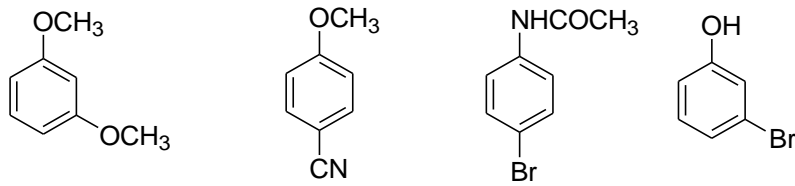
3. Da quale alchene ciclico deriva il seguente acido bicarbossilico composto per ozonolisi (O_3):



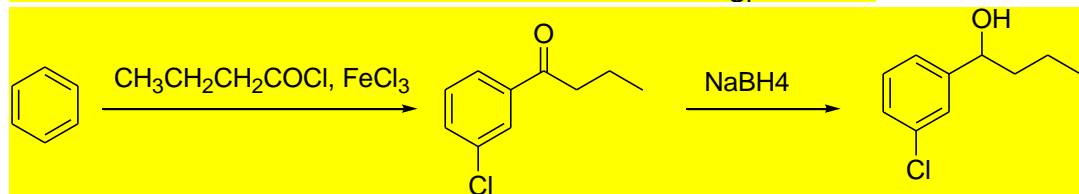
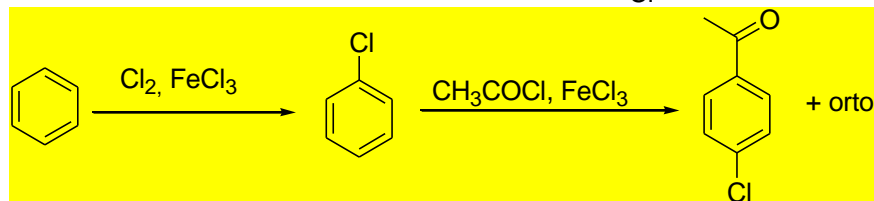
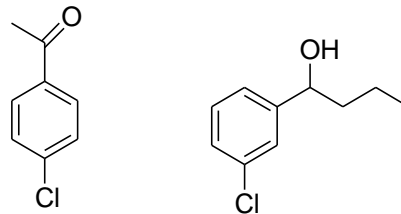
4. Scrivere la formula dell'**1-fenil-2-metil cicloesene** e disegnare i prodotti delle sue reazioni con: a) H_2 , Pd; b) $KMnO_4$, H_2O ; c) Br_2 ; d) HBr; e) HBr, ROOBr; f) Br_2 , $h\nu$ (2 prodotti principali); g) O_3 o $NaIO_4$



5. Scrivere i prodotti che si formano dalla nitratura ($\text{H}_2\text{SO}_4/\text{HNO}_3$) di

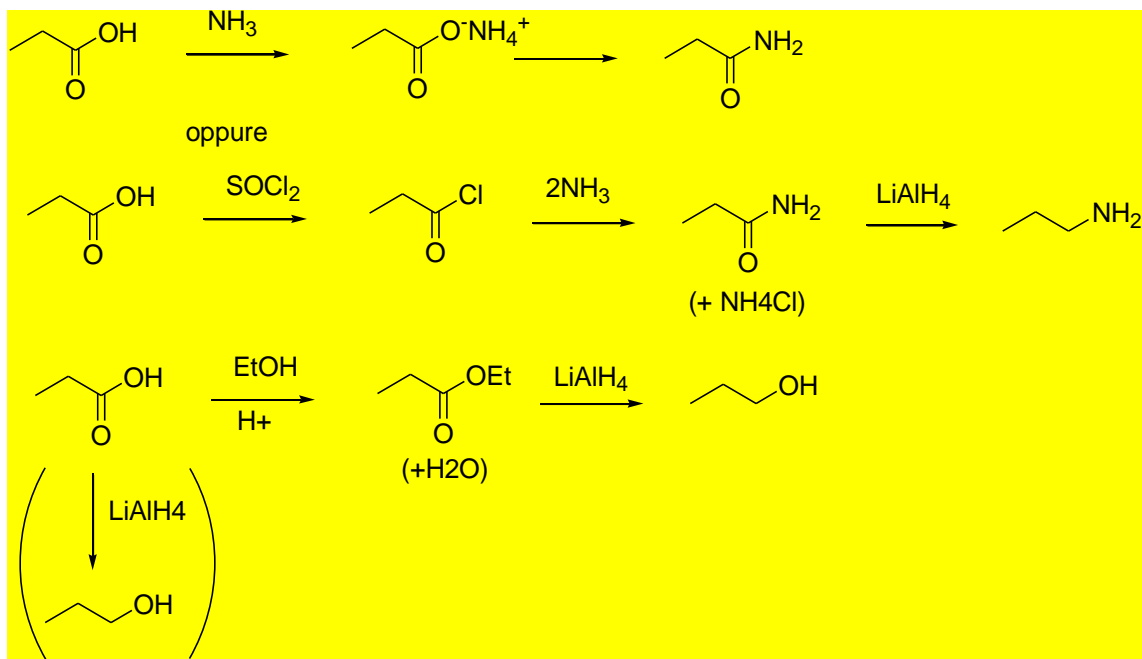


6. Proporre la sintesi dei seguenti composti a partire dal benzene:

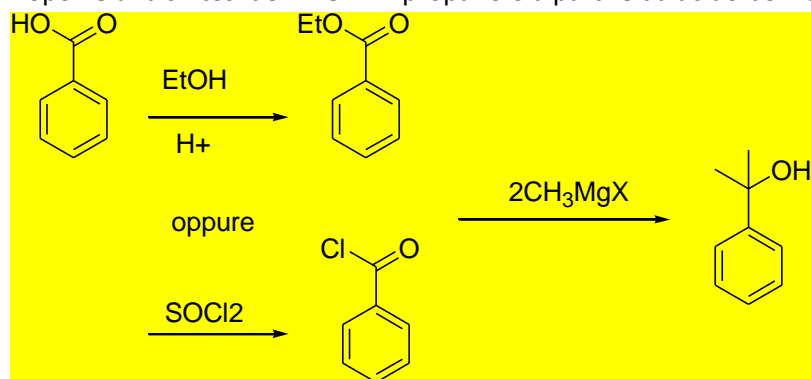


7. Indicare come è possibile trasformare l'acido propanoico nei seguenti composti :

a) Propanammide; b) 1-propanolo; c) propanoato di etile d) 1-propanammina



8. Proporre una sintesi del 2-fenil-2-propanolo a partire da acido benzoico



9. Scrivere i prodotti delle seguenti riduzioni

