

CAPITOLO 1

1. a) 6 b) 2 c) 7 d) 3 e) 5

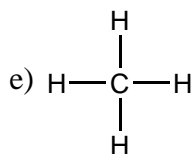
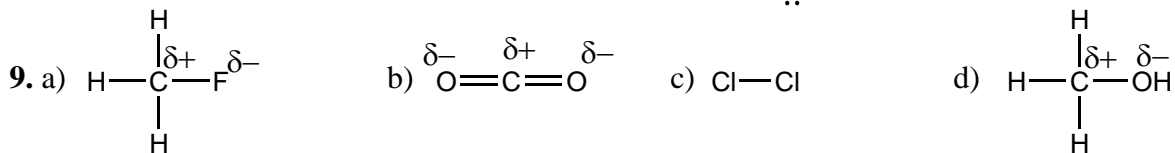
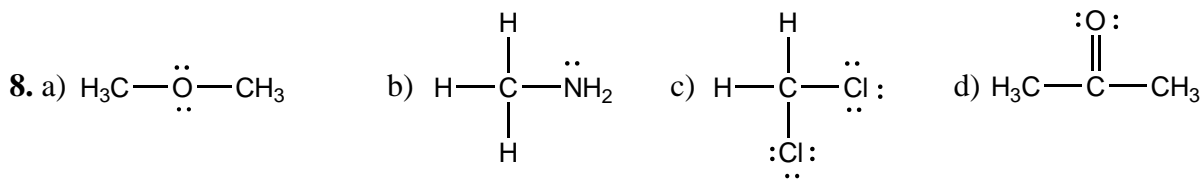
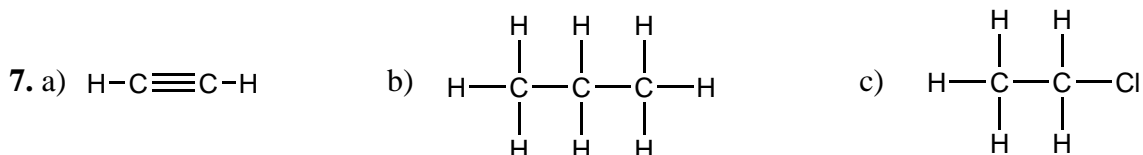
2. a) $1s^2 2s^1$ b) $1s^2 2s^2 2p^6 3s^1$ c) $1s^2 2s^2 2p^6 3s^2 3p^1$ d) $1s^2 2s^2 2p^6 3s^2 3p^4$

3. a) $AlCl_3$ b) CF_2Cl_2 c) NI_3 d) SiH_4

4. a) ionico b) covalente c) covalente polare

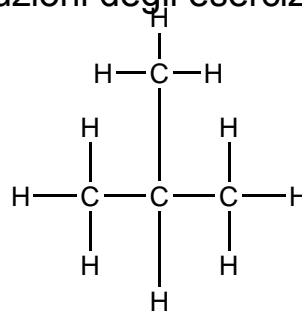
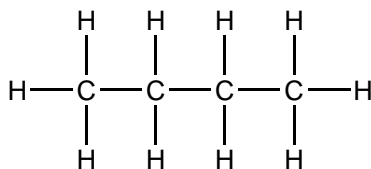
5. a) ionico b) covalente c) covalente d) covalente

6. a) 6; 2 b) 1; 1 c) 6; 4 d) 5; 3 e) 7; 1 f) 4; 4



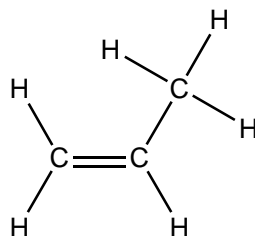
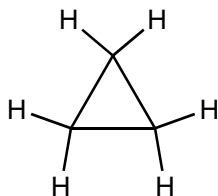
Percorsi di chimica organica - Soluzioni degli esercizi del testo

10.

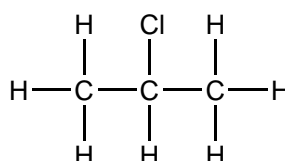
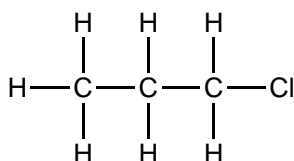


11.

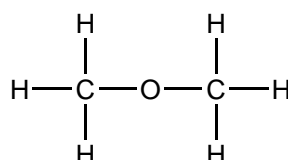
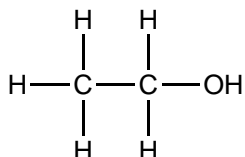
a)



b)

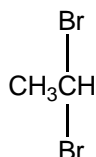
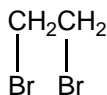


c)

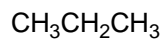


12.

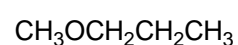
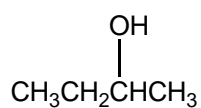
a)



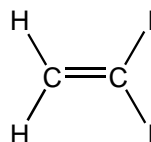
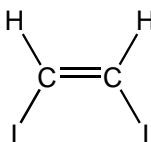
b)



c)

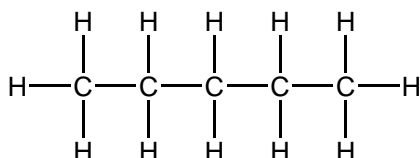


d)

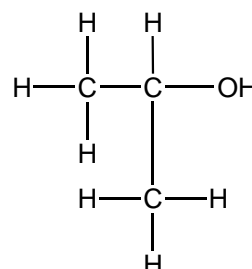


13.

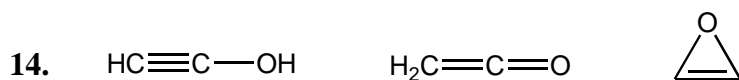
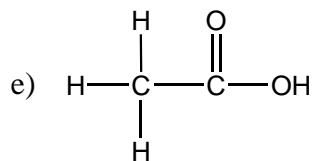
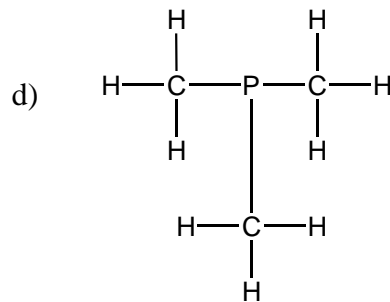
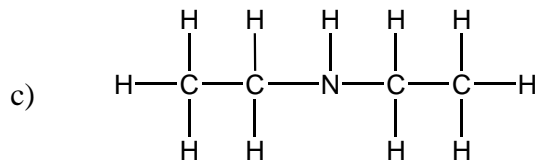
a)



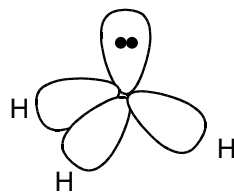
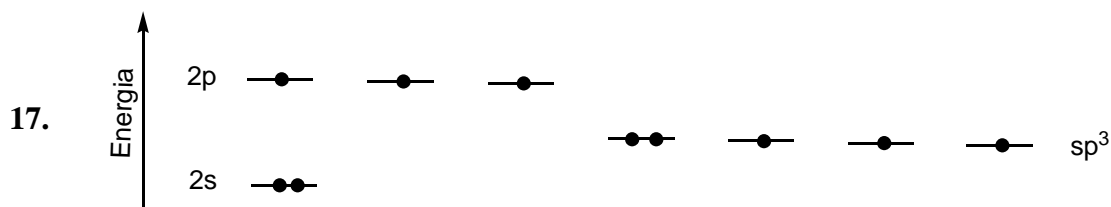
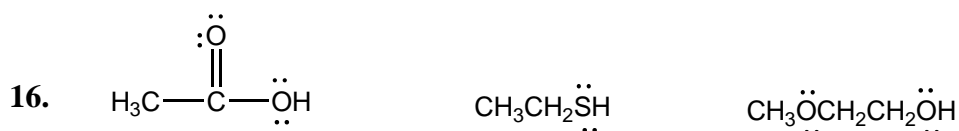
b)



Percorsi di chimica organica - Soluzioni degli esercizi del testo

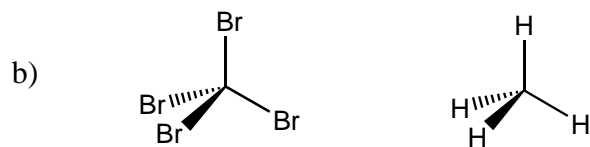


15. 180°

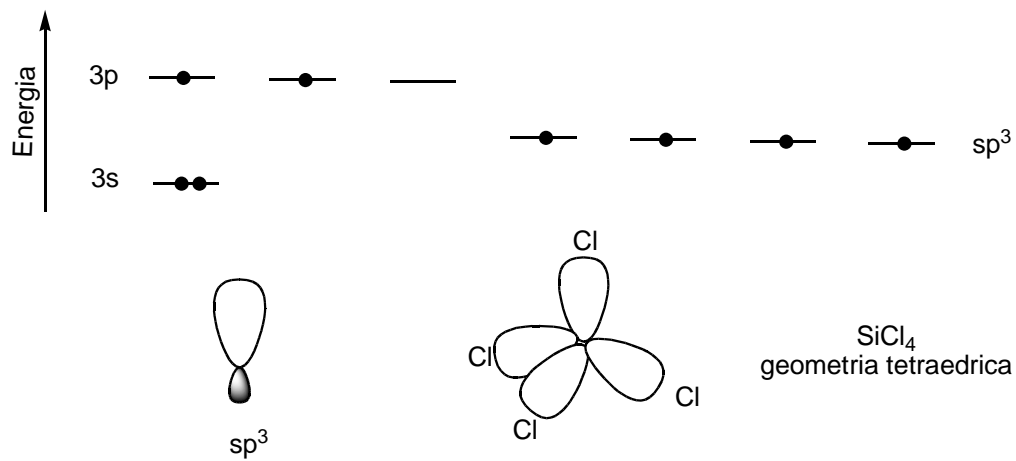


NH_3
geometria tetraedrica

18. a) Nello ione ammonio l'azoto è ibridato sp^3 , cioè combina l'orbitale atomico s e i tre orbitali atomici p così da ottenere quattro orbitali ibridi degeneri sp^3 . Ciascun orbitale atomico ibrido sp^3 dell'azoto si sovrappone all'orbitale atomico $1s$ di un atomo di idrogeno così da formare quattro legami σ diretti verso i vertici di un tetraedro.



19.



20. La molecola CHF_3 ha geometria tetraedrica.

