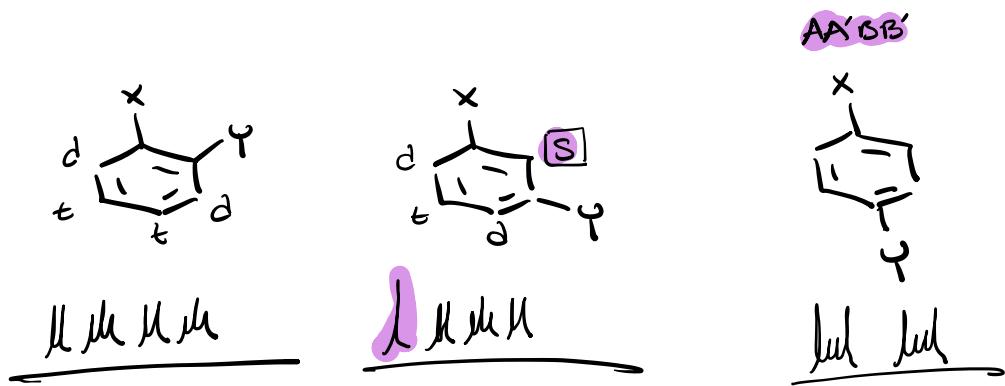
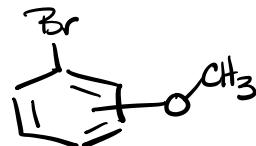


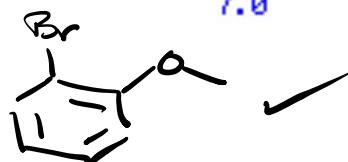
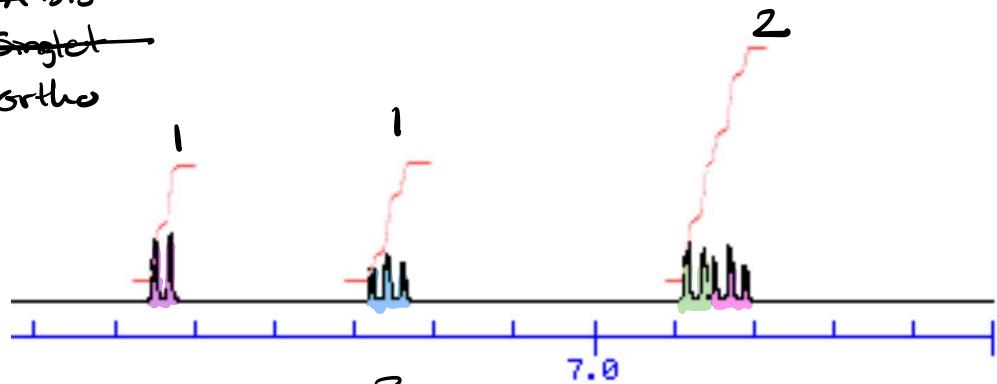
Aromatic Round Up - Disubstituted



26 C_7H_7OBr



AA'BB'
Singlet
ortho

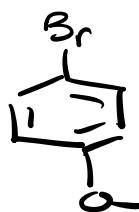
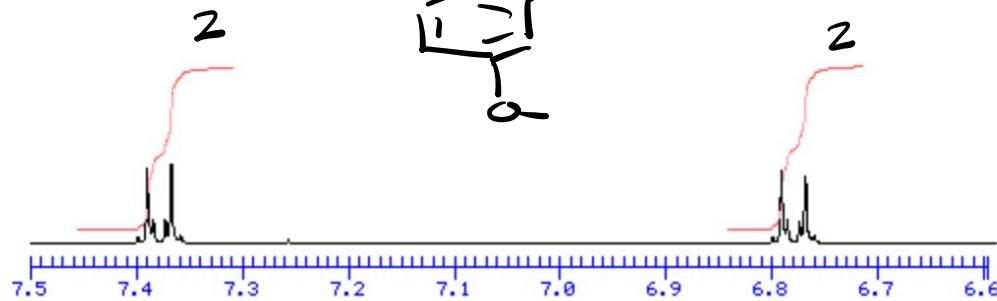
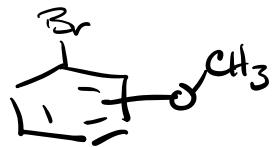


#16 C_7H_7OBr

(para AA'BB')

meta Singlet

ortho dttd



18 $C_6H_5NO_3$

Para

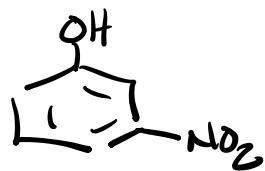
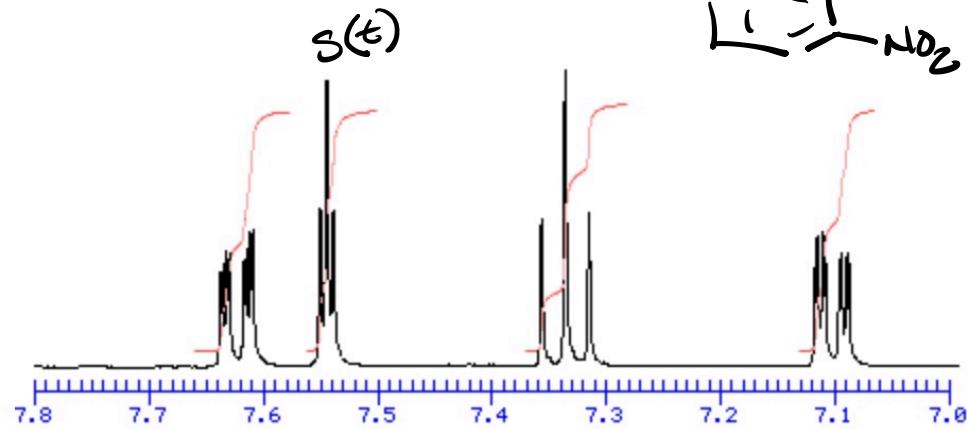
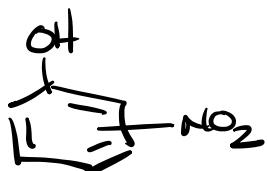
AA'BB'

ortho

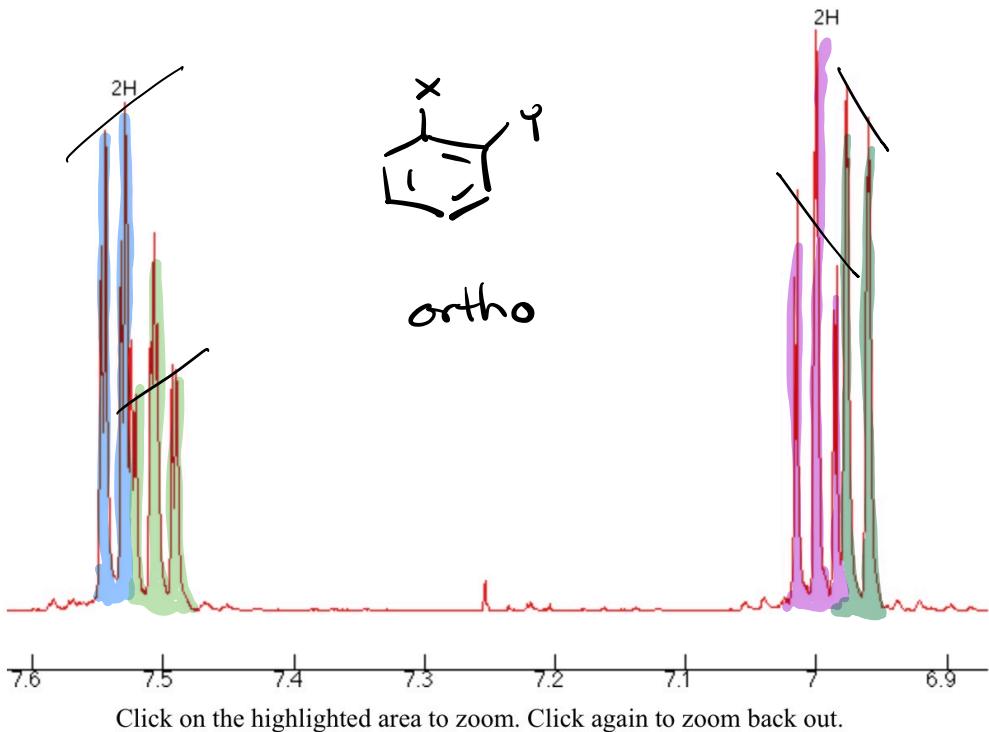
Singlet

meta

dttd



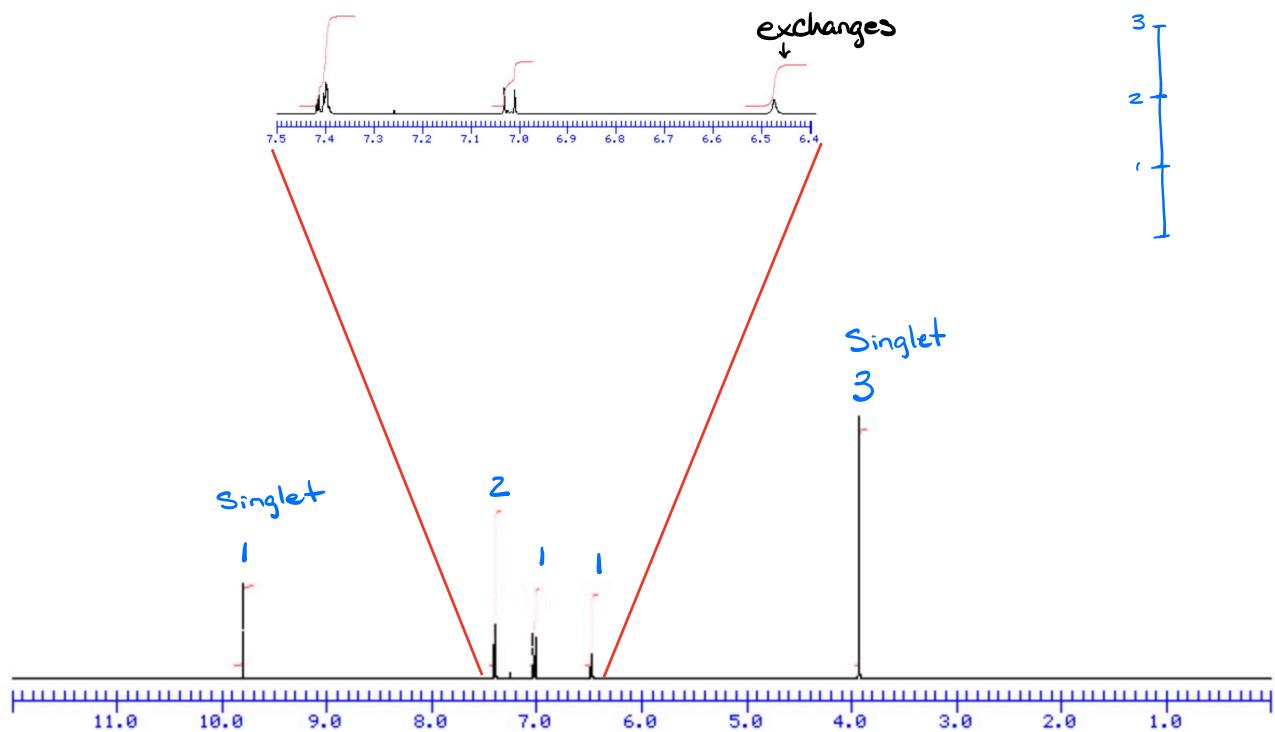
Problem 16 - ^1H NMR spectrum (CDCl_3 , 500 MHz)



Intermediate 1 # 10

$C_8H_8O_3$ 5 units unsaturation

1H -NMR



¹H NMR Table

<u>Ppm</u>	<u>Int</u>	<u>Mult</u>	<u>#n</u>	<u>Assignment</u>
3.9	3	Singlet	∅	CH_3 -Strong EWG ($\text{CH}_3\text{-O-}$)
6.48	1	Singlet (exchanges)	?	$-\text{OH}$
7.02	1	Doublet	1	$\text{Ar-H}, =^{\ddagger}$?
7.40	2	?	?	Ar-H
9.80	1	Singlet	∅	

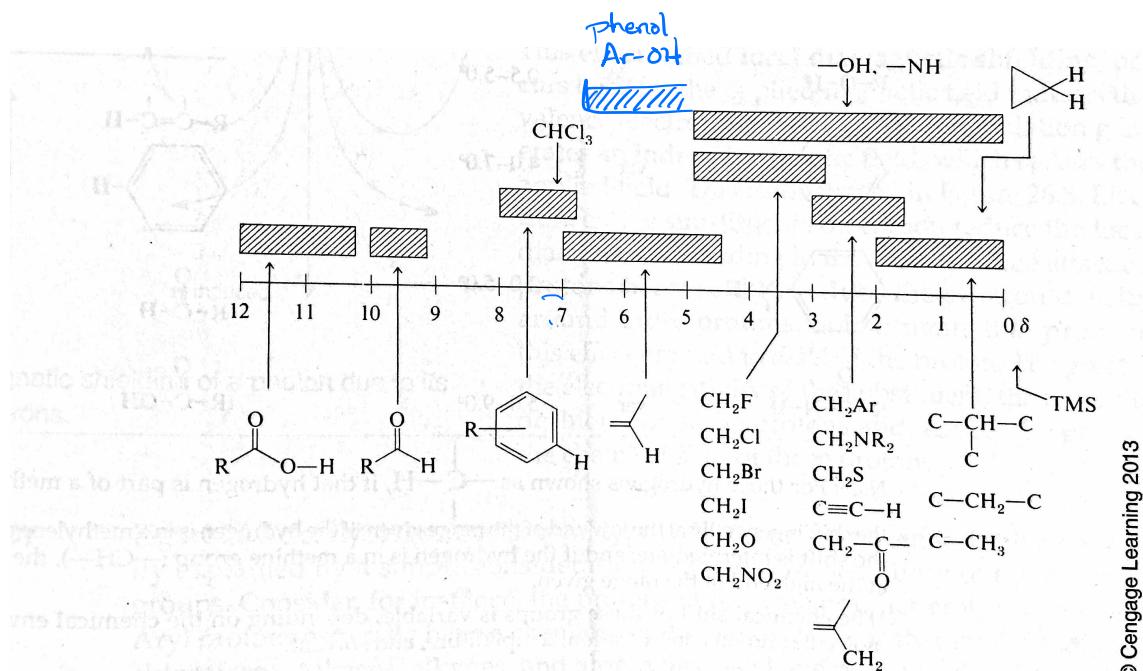
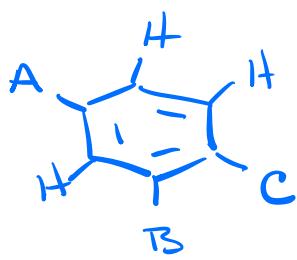
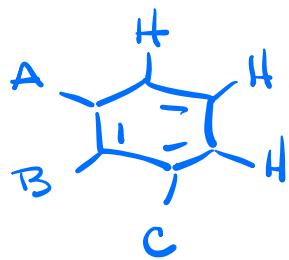
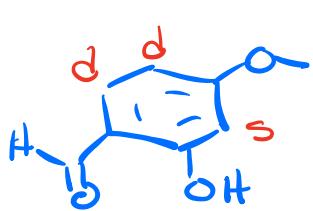
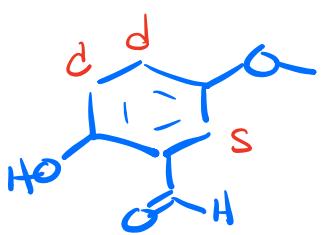
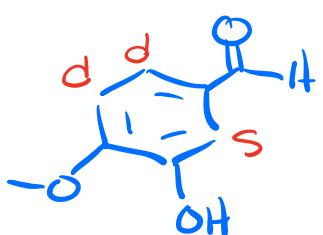
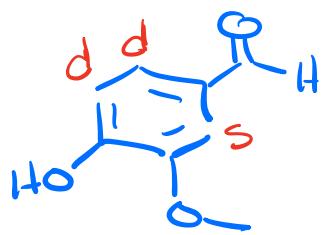
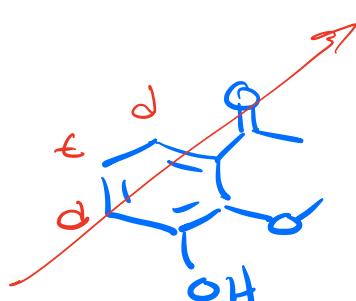
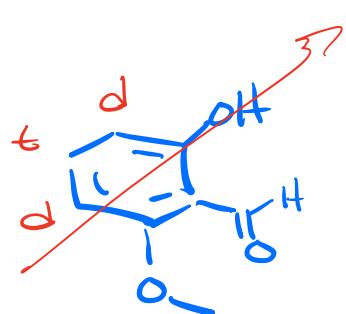
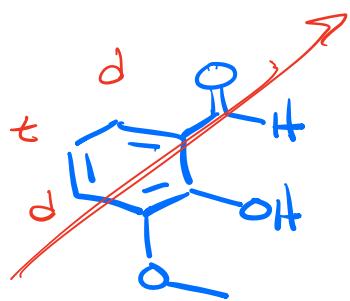


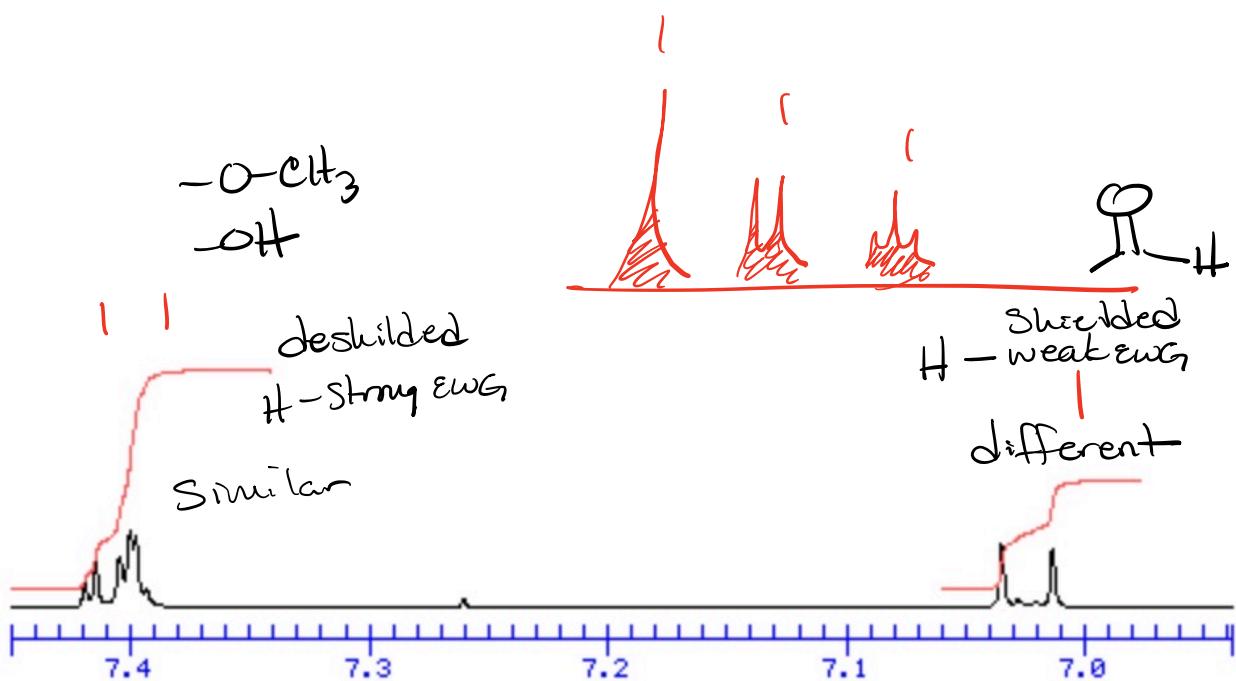
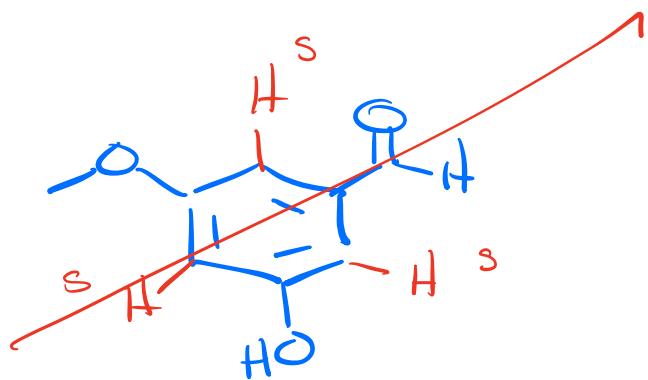
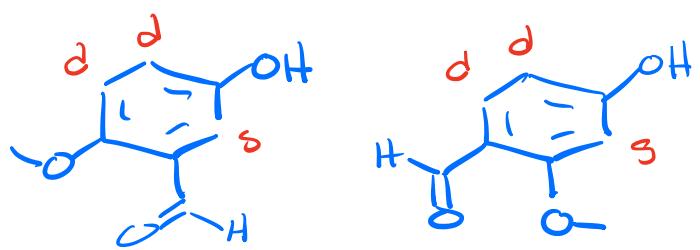
Figure 26.7

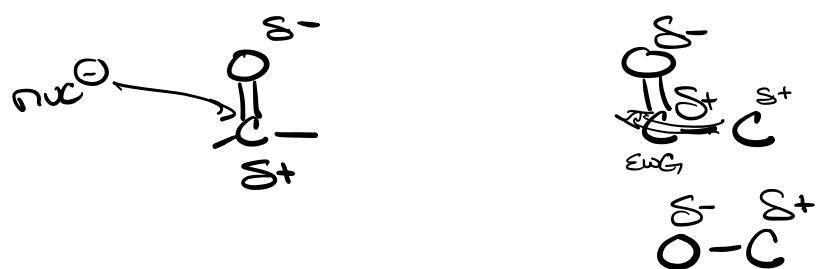
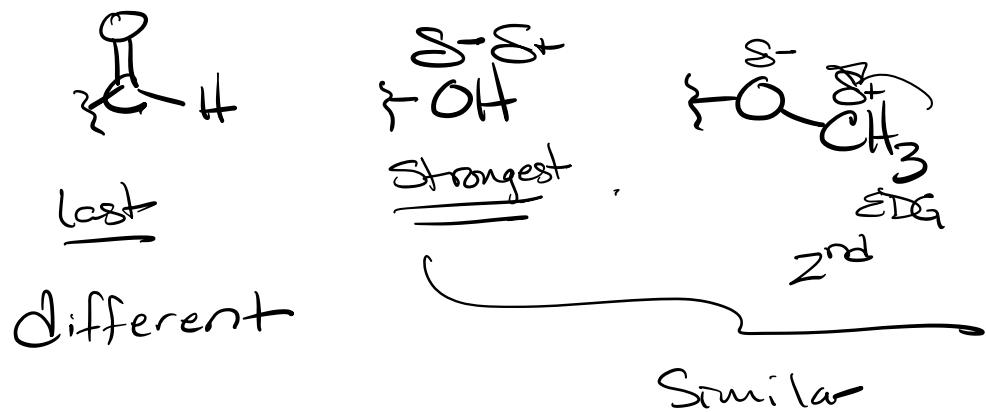
A simplified correlation chart for proton chemical shift values.



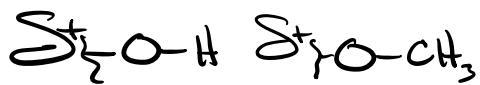
or - - -







deshielded



Shielded



\leftarrow
εwG

