

Séquence 4

Analyse structurale de la matière par spectroscopie RMN

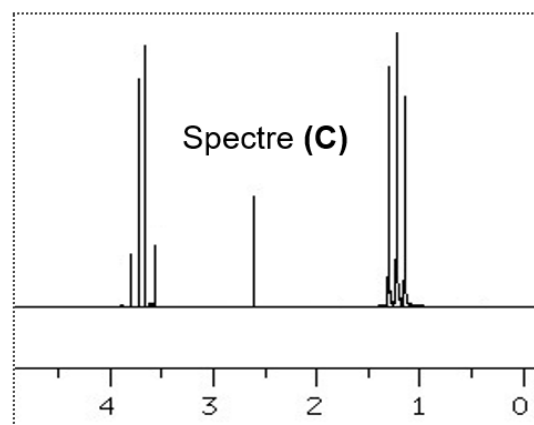
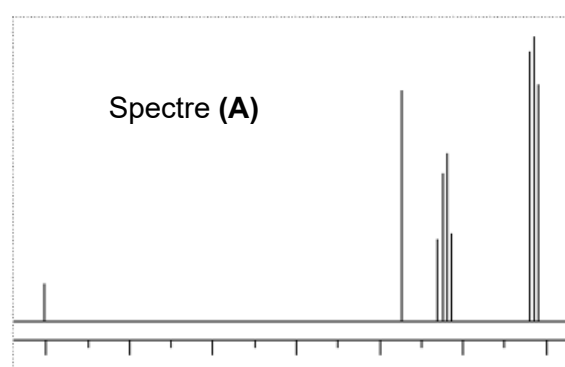
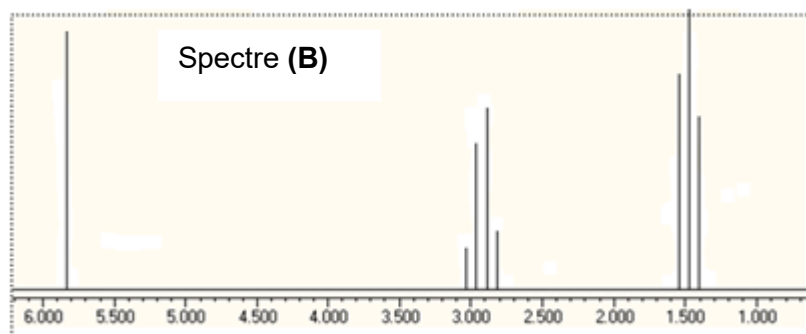
Exercices

EX1/ Pour chaque molécule ci-dessous, dénombrer les groupes de protons équivalents

(a)	(b)	(c)	(d)	(e)	(f)

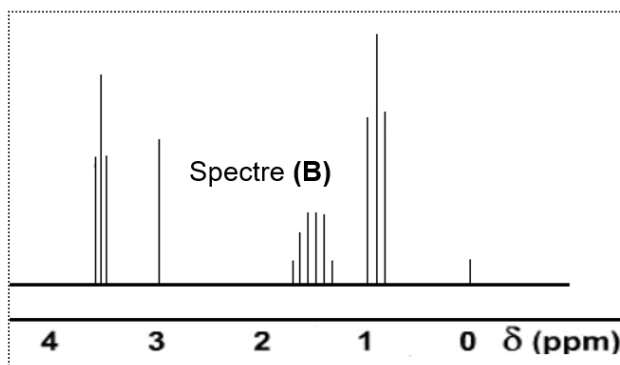
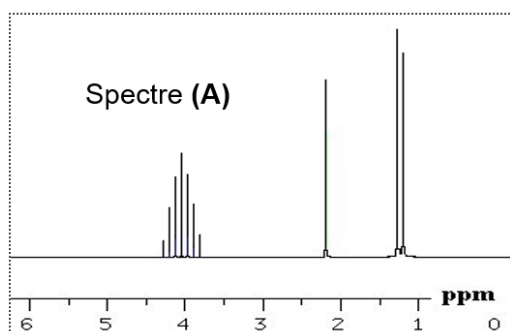
EX2/

Spectre	Spectre

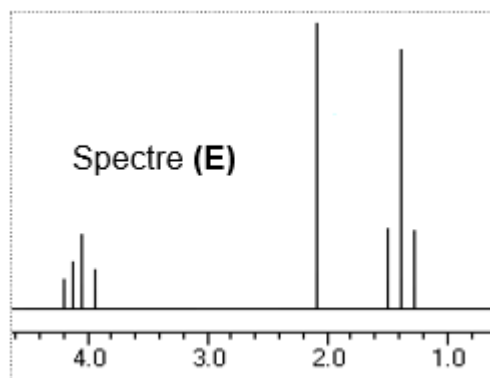
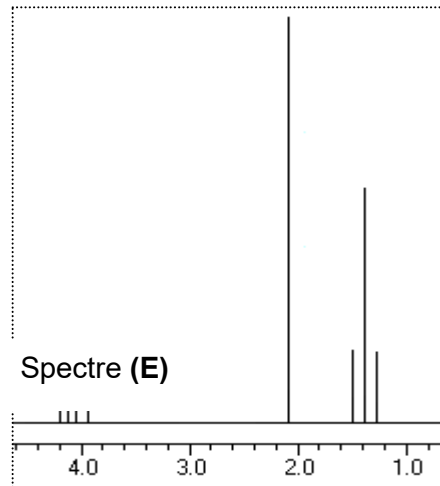
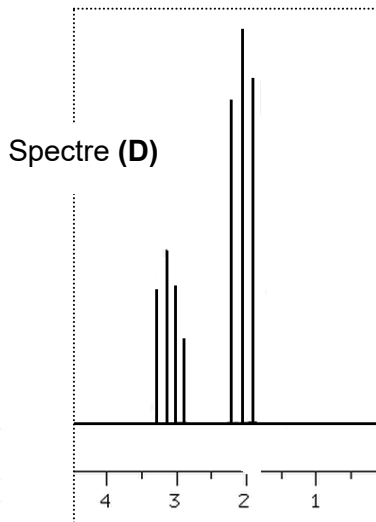
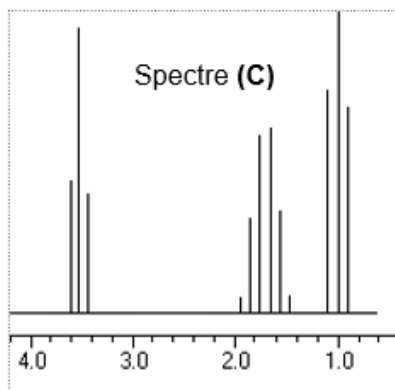
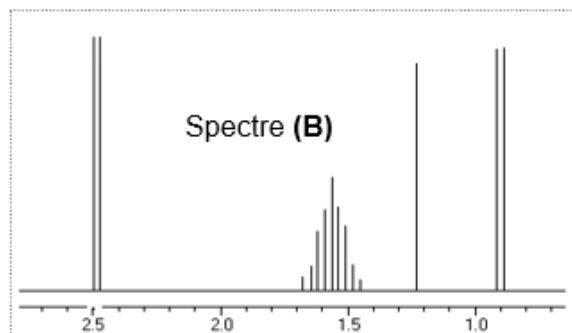
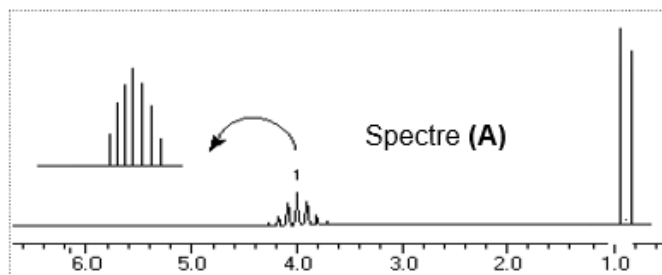


EX3/

Spectre	Spectre	Spectre



EX4/

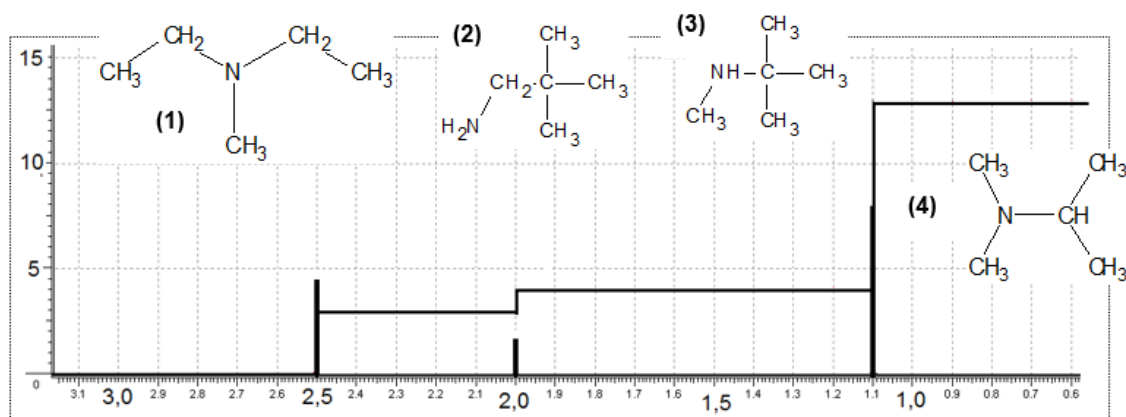


Spectre	Spectre	Spectre	Spectre	Spectre
<chem>CH3-CH2-I</chem>	<chem>CC(=O)OC(C)C</chem>	<chem>CC(C)CNC</chem>	<chem>CC(C)CBr</chem>	<chem>CC(C)CBr</chem>

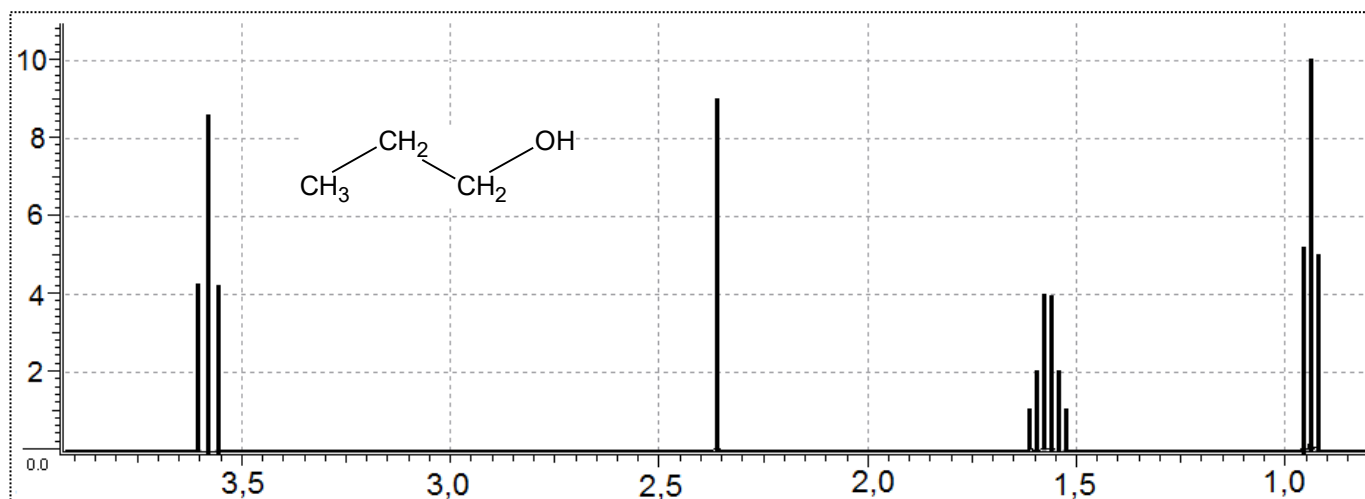
EX5/

Retrouver le nombre de protons équivalents associés à chaque signal du spectre, puis en déduire la formule de la molécule parmi celles proposées

STL SPCL Chimie



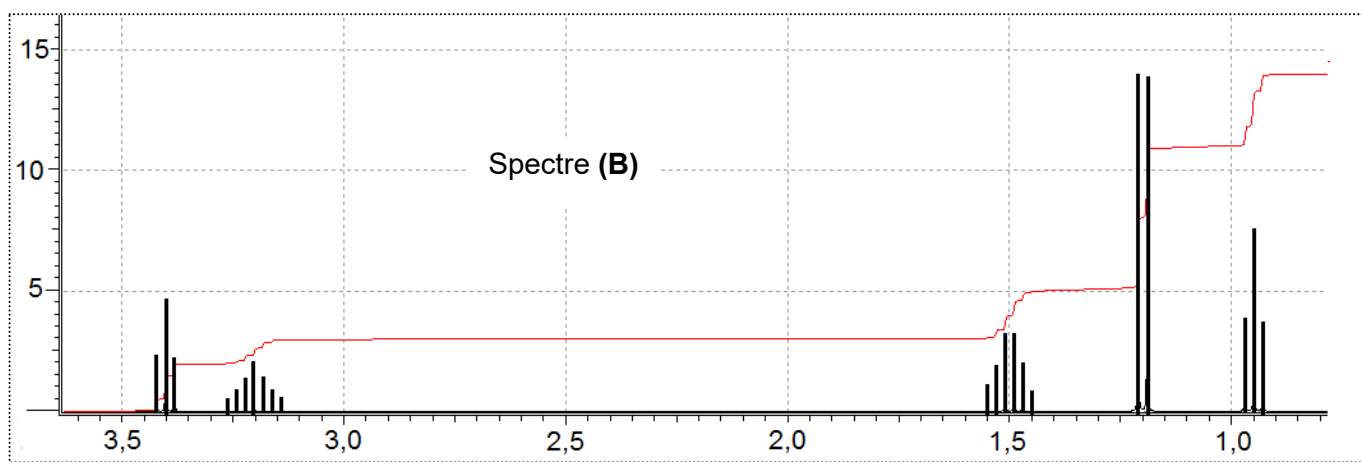
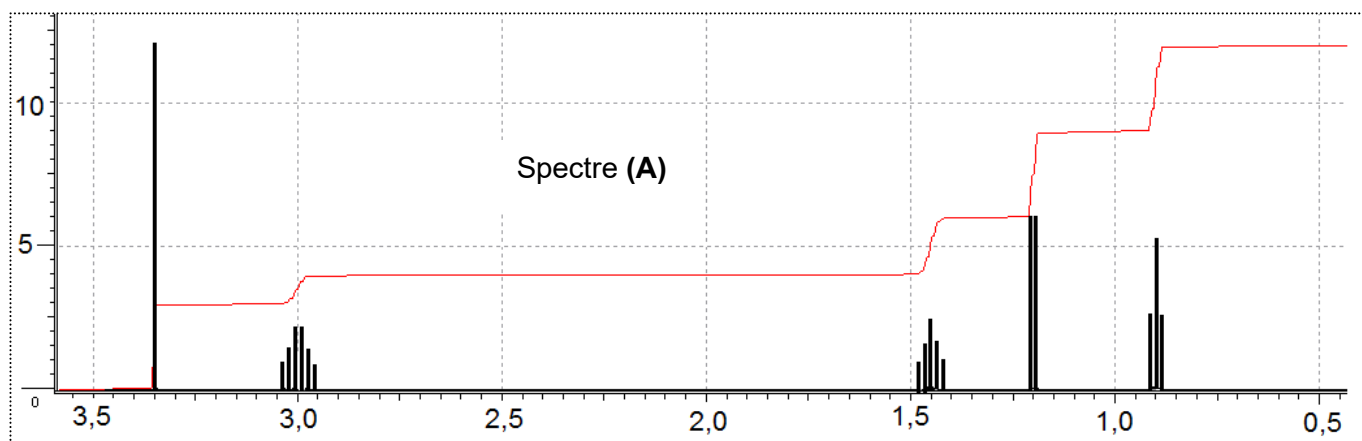
EX6/



Associer à chaque groupe de protons équivalents, son signal ; dessiner sur le spectre la courbe d'intégration

EX7/

Spectre	Spectre
<chem>CC(C)OCC</chem>	<chem>CC(C)OC</chem>



EX8/

Spectre	Spectre
$\text{CH}_3-\text{CH}_2-\text{CH}_2-\text{OH}$	$\begin{array}{c} \text{CH}_3 \quad \text{CH}_3 \\ \diagdown \quad \diagup \\ \text{CH} \\ \\ \text{OH} \end{array}$

