



For the  $^1\text{H}$  NMR spectrum of each of the following compounds, predict

- the number of signals
- the relative intensity of the signals
- the splitting pattern of each signal
- the chemical shift ( $\delta$ ) of each signal

compound	number of signals	signal	relative intensity	splitting pattern	chemical shift ( $\delta$ )
	<b>3</b>	a	<b>3</b>	<b>s</b>	<b>2.1-2.6</b>
		b	<b>1</b>	<b>m</b>	<b>3.7-4.1</b>
		c	<b>6</b>	<b>d</b>	<b>0.7-1.2</b>
		d			
		e			
		f			
	<b>5</b>	a	<b>3</b>	<b>d</b>	<b>0.7-1.2</b>
		b	<b>1</b>	<b>q</b>	<b>4.5-6.0</b>
		c	<b>3</b>	<b>s</b>	<b>0.7-1.2</b>
		d	<b>1</b>	<b>m</b>	<b>1.4-1.6</b>
		e	<b>6</b>	<b>d</b>	<b>0.7-1.2</b>
		f			
	<b>6</b>	a	<b>9</b>	<b>s</b>	<b>0.7-1.2</b>
		b	<b>1</b>	<b>q</b>	<b>3.1-3.9</b>
		c	<b>3</b>	<b>d</b>	<b>0.7-1.2</b>
		d	<b>6</b>	<b>s</b>	<b>0.7-1.2</b>
		e	<b>2</b>	<b>q</b>	<b>1.2-1.4</b>
		f	<b>3</b>	<b>t</b>	<b>0.7-1.2</b>