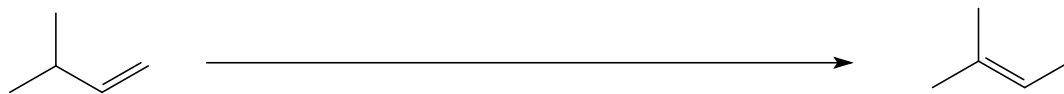


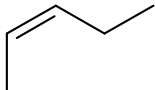
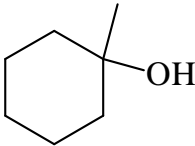
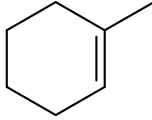
Marks
3

- Show clearly the reagents you would use to carry out the following chemical conversion. Draw constitutional formulas for any intermediate compounds.
NOTE: more than one step may be necessary.

**THE REMAINDER OF THIS PAGE IS FOR ROUGH WORKING ONLY**

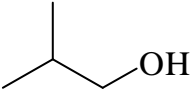
Marks
3

- Complete the following table. Make sure you complete the name of the starting material where indicated.

STARTING MATERIAL NAME (where required)	REAGENTS/ CONDITIONS	CONSTITUTIONAL FORMULA(S) OF MAJOR ORGANIC PRODUCT(S)
 Name:	Br_2 (CCl_4 solvent)	
		

Marks
3

- Complete the following table. Make sure you complete the name of the starting material or major product where indicated.

STARTING MATERIAL	REAGENTS/ CONDITIONS	CONSTITUTIONAL FORMULA(S) OF MAJOR ORGANIC PRODUCT(S)
$\text{CH}_3\text{CH}=\text{CHCH}_3$		$\begin{array}{c} \text{CH}_3\text{CH}_2\text{CHCH}_3 \\ \\ \text{OH} \end{array}$ Name:
	1. Na metal 2. $\text{CH}_3\text{CH}_2\text{Br}$	

Marks
3

- Complete the following table. Make sure you complete the name of the starting material where indicated.

STARTING MATERIAL	REAGENTS/ CONDITIONS	CONSTITUTIONAL FORMULA(S) OF MAJOR ORGANIC PRODUCT(S)
