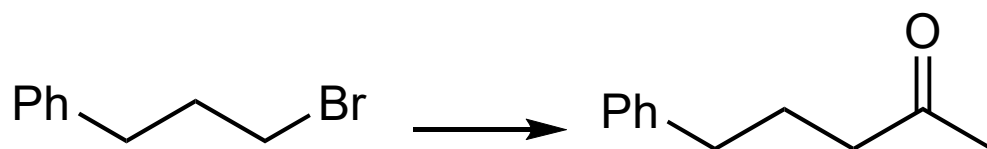


Identify the suitable set(s) of reagents for the following synthesis.



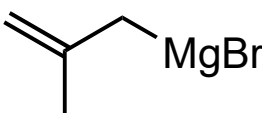
**I** 1.  $\text{HC}\equiv\text{CNa}$ ; 2.  $\text{BH}_3\text{-THF}$ ; 3.  $\text{H}_2\text{O}_2$ ,  $\text{NaOH}$

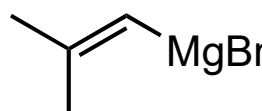
**II** 1.  $\text{HC}\equiv\text{CNa}$ ; 2.  $\text{H}_2\text{O}$ ,  $\text{H}_2\text{SO}_4$ ,  $\text{HgSO}_4$

**III** 1.  $\text{Mg}$ ; 2. ethanal; 3.  $\text{H}_3\text{O}^+$ ; 4. PCC

**IV** 1.  $\text{Mg}$ ; 2. propanone; 3.  $\text{H}_3\text{O}^+$ ; 4. PCC

**V** 1.  $\text{Mg}$ ; 2.  3.  $\text{H}_3\text{O}^+$ ; 4. PCC

**VI** 1.  2.  $\text{H}_3\text{O}^+$ ; 3.  $\text{O}_3$ ; 4. DMS

**VII** 1.  2.  $\text{H}_3\text{O}^+$ ; 3.  $\text{O}_3$ ; 4. DMS