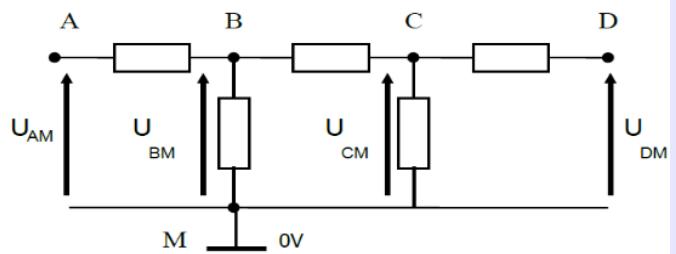


### 5. Loi des mailles ☺

On considère le circuit ci-contre.

Déterminer  $U_{AB}$ ,  $U_{BC}$ ,  $U_{CD}$  sachant que:  $U_{AM}=5V$ ,  $U_{BM}=3V$ ,  $U_{CM}=4V$  et  $U_{DM}=6V$ .



### Solution

$$U_{AB} + U_{BM} = U_{AM} \text{ d'où } U_{AB} = U_{AM} - U_{BM} = 5 - 3 = 2V$$

$$U_{BC} + U_{CM} = U_{BM} \text{ d'où } U_{BC} = U_{BM} - U_{CM} = 3 - 4 = -1V$$

$$U_{CD} + U_{DM} = U_{CM} \text{ d'où } U_{CD} = U_{CM} - U_{DM} = 4 - 6 = -2V$$