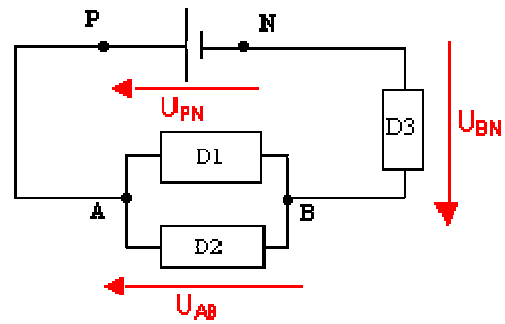


Exercice 1:

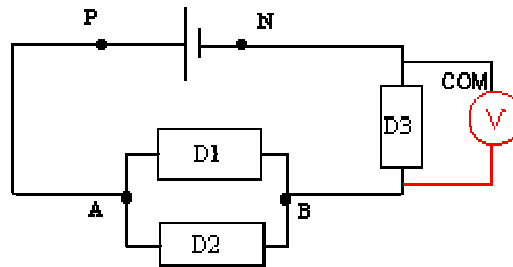
1.



2.

On mesure une tension à l'aide d'un **voltmètre**.

Un voltmètre se branche en **dérivation** (attention le fil COM doit être relié au point N).



3.

$$U_{PN} = U_{AB} + U_{BN} \Rightarrow U_{AB} = U_{PN} - U_{BN} \Rightarrow U_{AB} = 6 - 2,5 \Rightarrow U_{AB} = 3,5V.$$

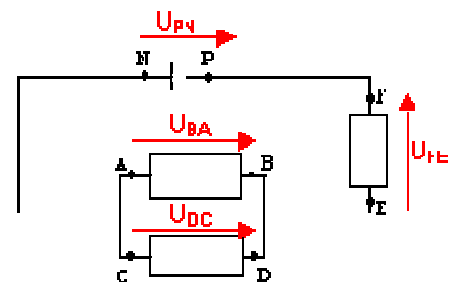
Exercice 2:

1.

2.

$$U_{PN} = U_{BA} + U_{FE} \Rightarrow U_{BA} = U_{PN} - U_{FE} \Rightarrow U_{BA} = U_{PN} - (-U_{EF}) \Rightarrow U_{BA} = 6 - (-3,54) \Rightarrow U_{BA} = 9,54V.$$

$$U_{DC} = U_{BA} \Rightarrow U_{DC} = 2,46V.$$



Exercice 3:

$$U_{AC} = U_{AB} + U_{BC} \Rightarrow U_{BC} = U_{AC} - U_{AB} \Rightarrow U_{BC} = 7 - 10 \Rightarrow U_{BC} = -3,0V.$$

$$U_{CA} = -U_{AC} \Rightarrow U_{CA} = -7V.$$

$$U_{DB} = U_{DA} + U_{AB} \Rightarrow U_{DB} = -3 + 10 \Rightarrow U_{DB} = 7,0V.$$

Exercice 4:

