Voltage Divider: In the circuit below find the voltage between the points $C$ and $D$. The result you obtain is useful to remember since this combination of resistors (called a voltage divider) occurs quite commonly in electronic circuits.


Solution:
The current in the circuit is $I=\frac{V_{A B}}{\left(R_{1}+R_{2}\right)}$.
Hence the voltage $V_{C D}=R_{2} \cdot I=R_{2} \frac{V_{A B}}{\left(R_{1}+R_{2}\right)}$

