

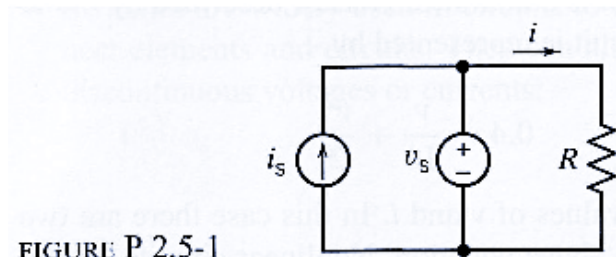
Universidad de Puerto Rico
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Departamento de Ingeniería Eléctrica y Computadoras

INEL 4075 Asignacion #2:

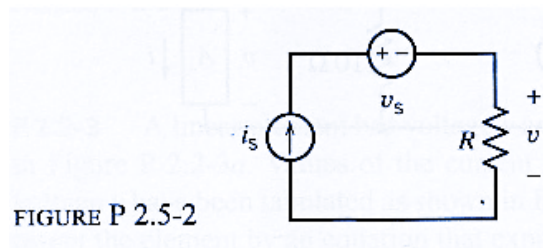
Semana de lunes 26 de enero de 2015.

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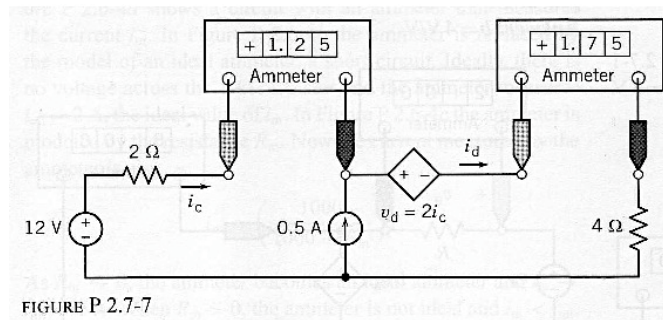
Sección: _____



- P2.5-1** A current source and a voltage source are connected in parallel with a resistor as shown in Figure P2.5-1. All of the elements connected in parallel have the same voltage, v_s in this circuit. Suppose that $v_s = 15 \text{ V}$, $i_s = 3 \text{ A}$, and $R = 5 \Omega$.
- (a) Calculate the current i in the resistor and the power absorbed by the resistor.
- (b) Change the current source current to $i_s = 5 \text{ A}$ and recalculate the current, i , in the resistor and the power absorbed by the resistor.



- P2.5-2** A current source and a voltage source are connected in series with a resistor as shown in Figure P 2.5-2. All of the elements connected in series have the same current, i_s , in this circuit. Suppose that $v_s = 10 \text{ V}$, $i_s = 2 \text{ A}$, and $R = 5 \Omega$.
- (a) Calculate the voltage v across the resistor and the power absorbed by the resistor.
- (b) Change the voltage source voltage to $v_s = 5 \text{ V}$ and recalculate the voltage, v , across the resistor and the power absorbed by the resistor.



P 2.7-7 Find the power absorbed by the CCVS in Figure P 2.7-7.