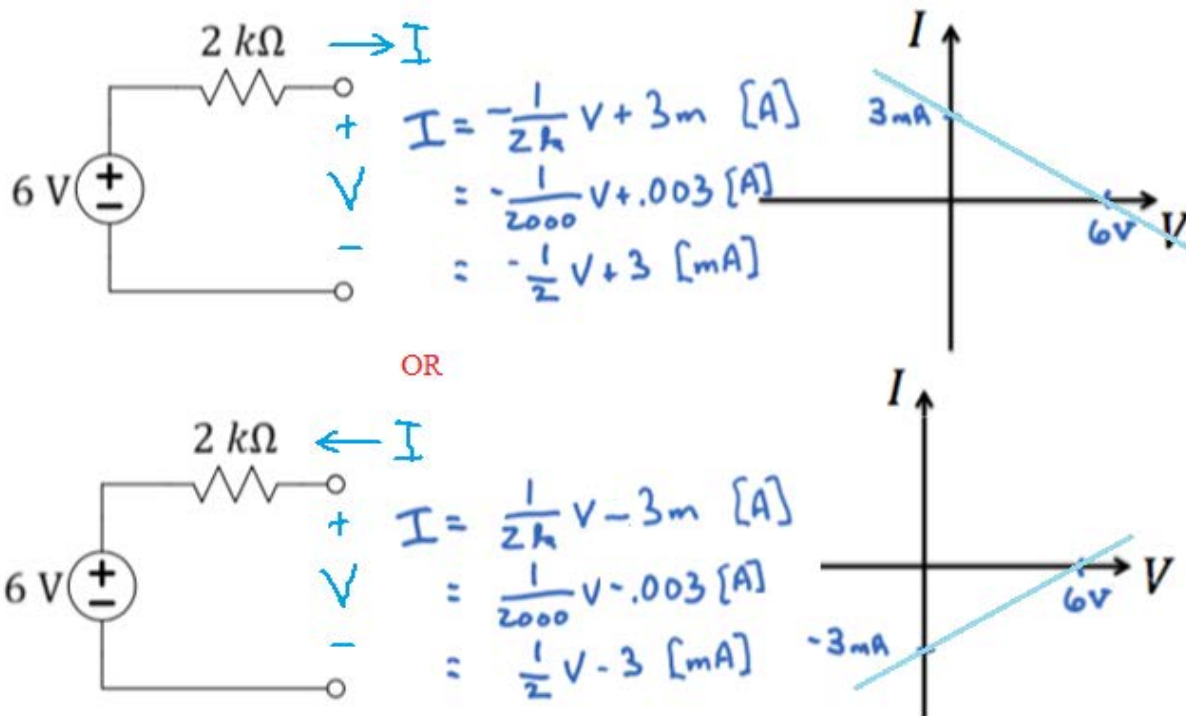
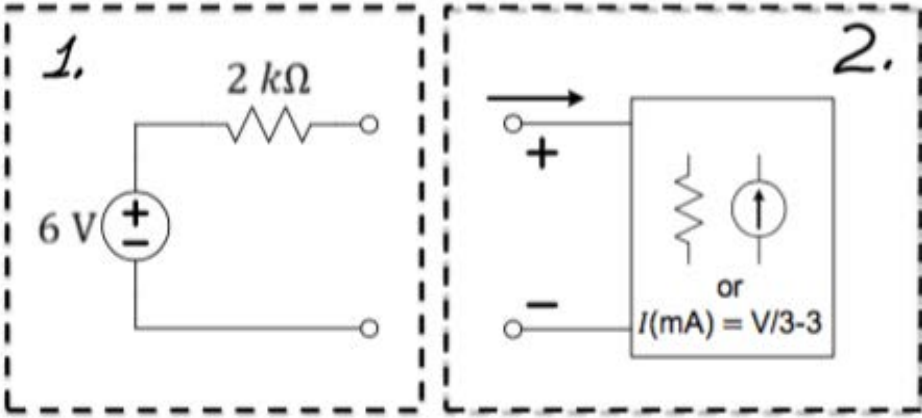


L8Q1	What is the voltage drop across an ideal ammeter	0	V		
L8Q2	What is the current through an ideal voltage source?	0	A		
L8Q3	Which set of graphs corresponds to pure resistances?	B. Even negative slope are possible if the current polarity is "uphill" to the defined voltage polarity.			
L8Q4	What are the IV characteristics of the circuit above? Include the graph.	Your instructor most likely defined voltage polarity with the + on top, but might have defined current polarity either direction. Both of these solutions are provided below. We will assume the first solution in the rest of the answers below.			



L8Q5	What are the IV characteristics of the circuit above? Include the graph.	same as circuit in Q4			
L8Q6	What are the current values I when V equals 0, 2V, 4V?	3/2, 4, 13/2	A		

L8Q7	What are the current values I1 when V1 equals 0, 2V, 4V?	-11, -8.5, -6	A		
L8Q8	What are the IV characteristics of a 3 mA current source? Use polarities defined in sub-circuit 2.	$I = -3\text{mA}$			
L8Q9	What are the IV characteristics of a 3kΩ resistor? Use polarities defined in sub-circuit 2.	$I = (1/3000) * V$			



L8Q10	Considering the three choices for circuit #2 - a 3mA current source, a 3kΩ resistor, or a combination with IV characteristics $I(\text{mA}) = (1/3) * V - 3$ , what is the operating point when the 2 sub-circuits are connected? Which sub-circuit supplies the power?	With the polarity of the voltage relative to the current direction of sub-circuit 2 the current must be negative when the voltage is positive (or vice versa but this is never the case)			
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