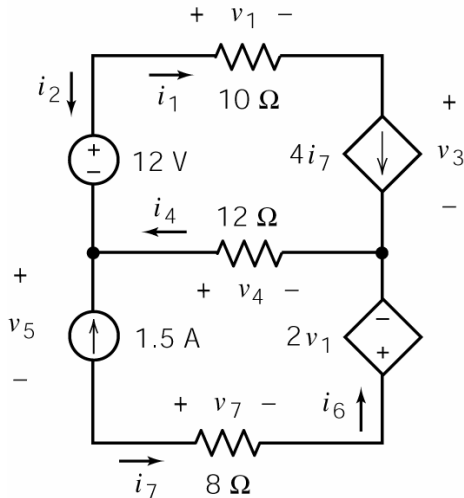


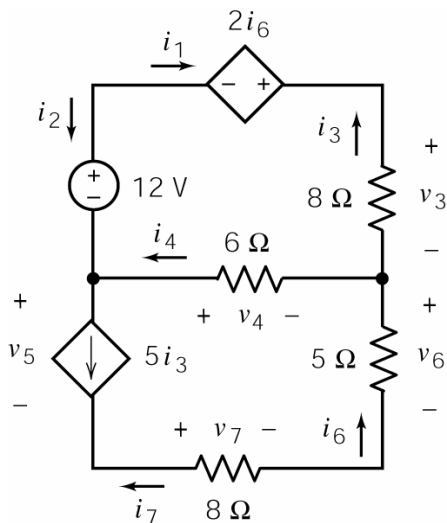
How Can We Check...element currents and voltages?

1. The reference directions of the element currents and voltages are labeled on this circuit drawing. The subscripts suggest a numbering of the 7 elements of this circuit. That numbering has been used to tabulate the values of the voltage and current of each circuit element. Check to see if the tabulated values satisfy the constitutive equations of the circuit elements. Verify that power is conserved.



	v, V	i, A	$p = iv, \text{W}$
1	-60.0	-6.0	360
2	12.0	6.0	72
3	162.0	-6.0	-972
4	90.0	-7.50	-675
5	222.0	1.50	333
6	-120.0	-1.50	180
7	-12.0	-1.50	18

2. The reference directions of the element currents and voltages are labeled on this circuit drawing. The subscripts suggest a numbering of the 7 elements of this circuit. That numbering has been used to tabulate the values of the voltage and current for each circuit element. Check to see if the tabulated values satisfy Kirchhoff's laws and the constitutive equations of the circuit elements. Verify that power is conserved.



	v, V	i, A	$p = iv, \text{W}$
1	-2.222	0.2222	-0.4937
2	12	-0.2222	-2.6664
3	1.778	-0.2222	-0.3951
4	-8.00	1.333	-10.664
5	-22.44	1.111	-24.933
6	-5.559	-1.111	6.176
7	8.889	1.111	9.8757