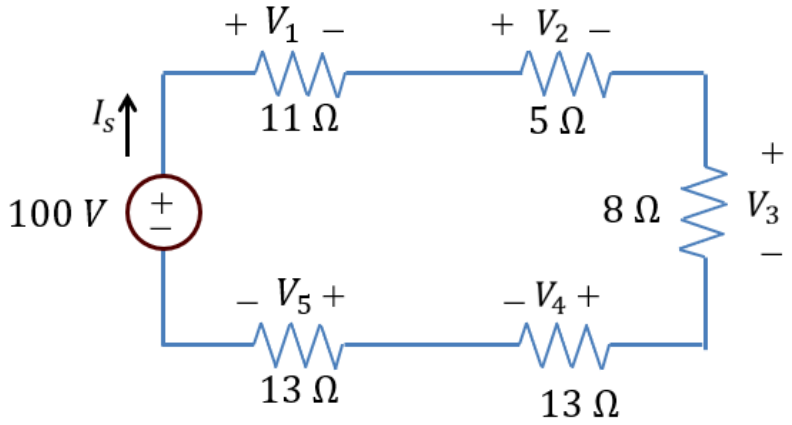
- Series combination: $R_{eq} = R_1 + R_2$
- Parallel combination $R_{eq} = \frac{1}{\frac{1}{R_1}+\frac{1}{R_2}} = \frac{R_1 R_2}{R_1+R_2}$
- Voltage dividers: $V_1 = V_s \cdot \frac{R_1}{R_1+R_2}$ and $V_2 = V_s \cdot \frac{R_2}{R_1+R_2}$
- Current dividers: $V_1 = V_s \cdot \frac{R_2}{R_1+R_2}$ and $V_2 = V_s \cdot \frac{R_1}{R_1+R_2}$

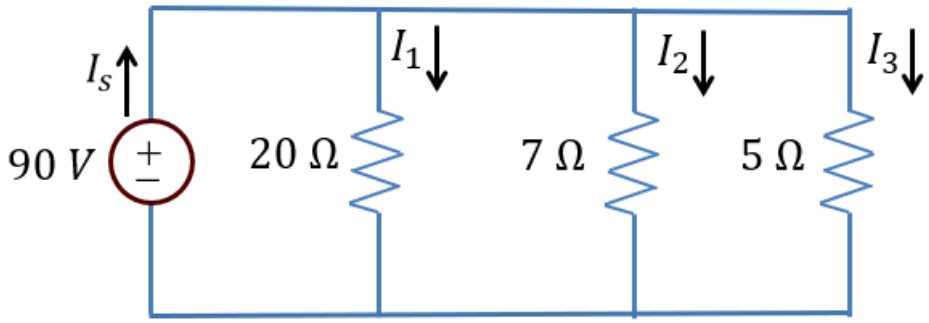
Convert delta to wye	Convert wye to delta
$R_1 = \frac{R_b \cdot R_c}{R_a + R_b + R_c}$ $R_2 = \frac{R_a \cdot R_c}{R_a + R_b + R_c}$ $R_3 = \frac{R_a \cdot R_b}{R_a + R_b + R_c}$	$R_a = \frac{R_1R_2 + R_2R_3 + R_1R_3}{R_1}$ $R_b = \frac{R_1R_2 + R_2R_3 + R_1R_3}{R_2}$ $R_c = \frac{R_1R_2 + R_2R_3 + R_1R_3}{R_3}$

- Measure voltage across device or between two nodes
- Measure current by breaking circuit
- Measure resistance with Wheatstone bridge

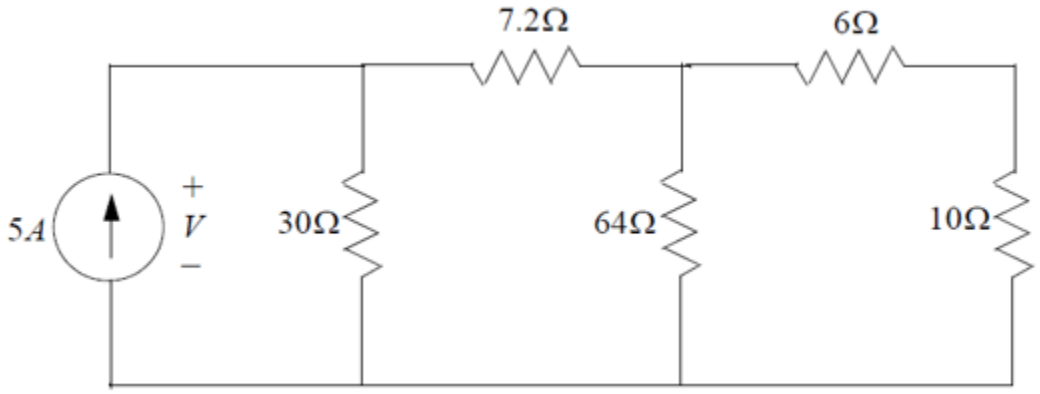
Solve for I_s and the voltage across each resistor



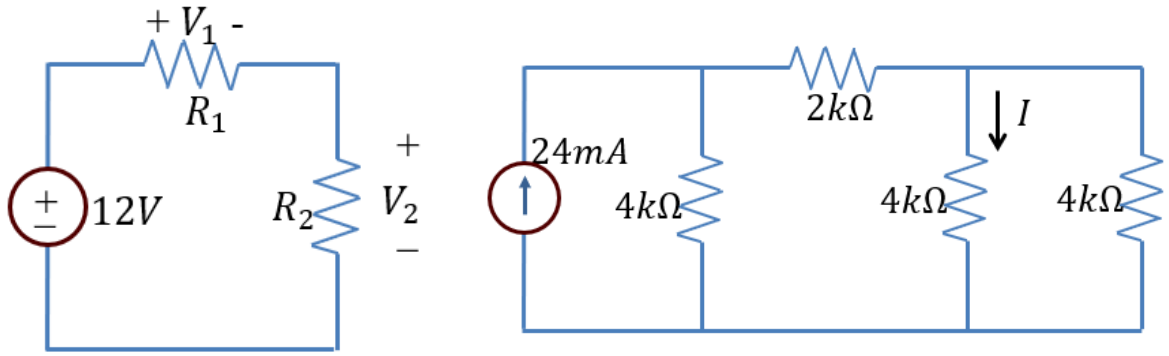
Solve for I_s and the current through each resistor



Find the voltage V, the power delivered by the source, and power dissipated in the 10Ω resistor



Examples of voltage and current dividers



Example of delta-wye transformation