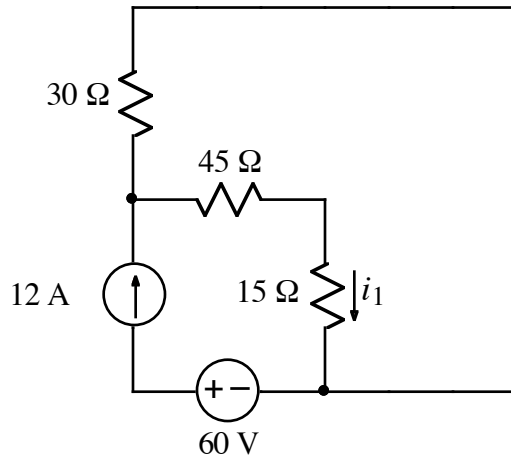


Ex:



Calculate i_1 .

SOL'N: Despite the presence of the 60 V source, the 12 A source feeds parallel resistances consisting of the 30 Ω and the 45 Ω plus 15 Ω, allowing us to use a current divider formula to calculate i_1 .

$$i_1 = 12 \text{ A} \frac{30 \Omega}{30 \Omega + (45 \Omega + 15 \Omega)} = 12 \text{ A} \frac{30 \Omega}{90 \Omega} = 4 \text{ A}$$