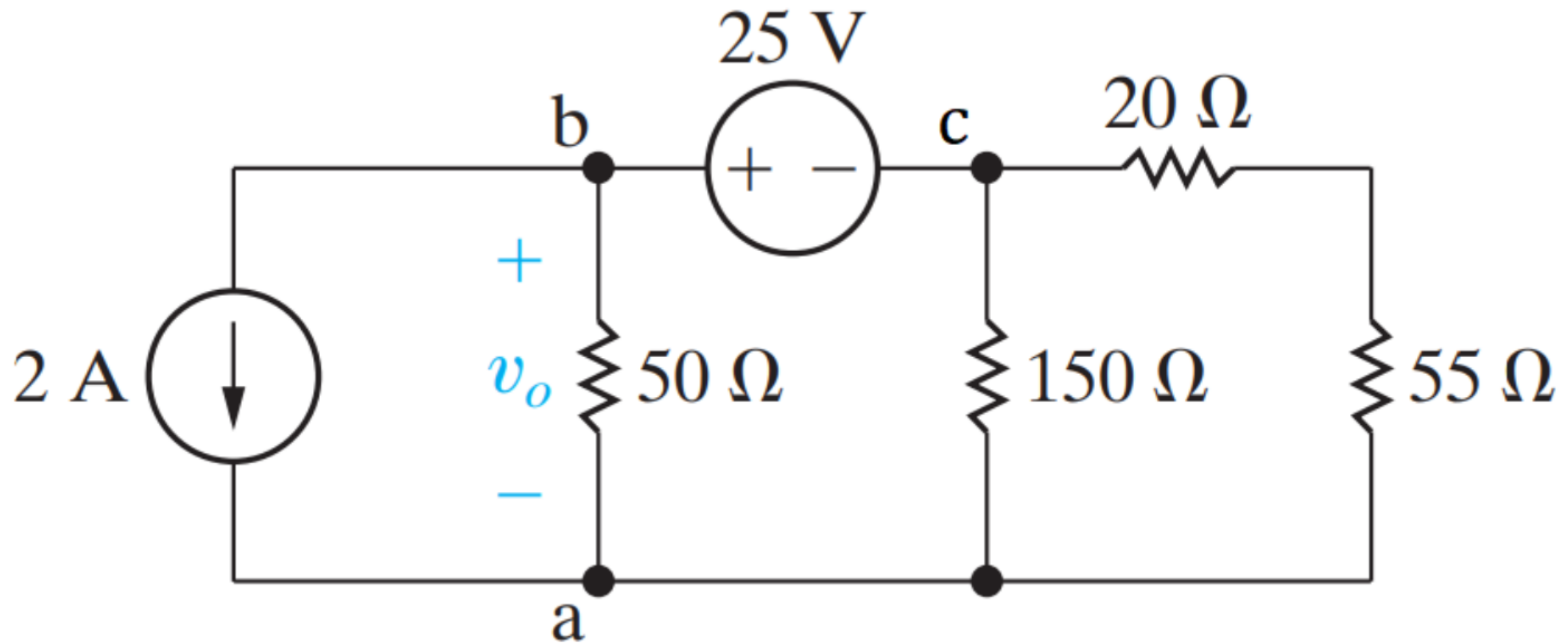# Supernode Constraint Equation

In a Supernode circuit analysis problem, a constraint equation can be used to match the number of equations with the number of unknowns in the system.

$$V_{Pos.} - V_{Neg.} = v$$

$$V_{Node\ B} - V_{Node\ C} = 25V$$

Adding a constraint to a system of equations ensures that $V_{Node\ B}$ and $V_{Node\ C}$ will have a 25-volt potential difference.