

2. We use $\sum_{n=1}^6 \Phi_{Bn} = 0$ to obtain

$$\Phi_{B6} = - \sum_{n=1}^5 \Phi_{Bn} = -(-1 \text{ Wb} + 2 \text{ Wb} - 3 \text{ Wb} + 4 \text{ Wb} - 5 \text{ Wb}) = +3 \text{ Wb} .$$