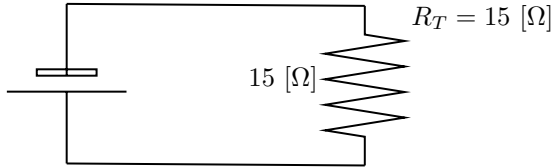
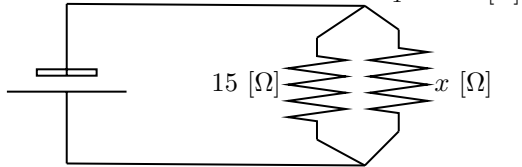


Initial Circuit



Final Circuit



$$\frac{15 \cdot x}{15 + x} = 4.5$$
$$\therefore x = 6.429\ [\Omega]$$