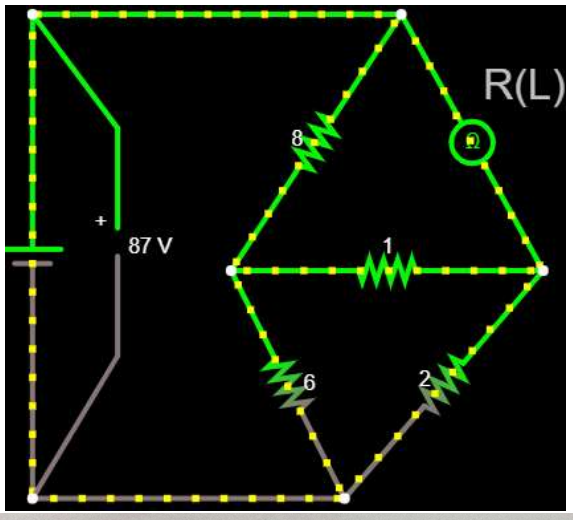

EXPERIMENT : No. 8 Verification of Principle of Maximum Power Transfer.

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For the given ~~&~~ circuit we need to compute R_L and find ~~that~~ ~~m~~ the value at which maximum power is transferred by the source

→ We need to short the 87 Ω

→ We need to short the 87V source

$$R_L = \frac{2 \times \left(\left(\frac{8 \times 6}{14}\right) + 2\right)}{2 + \frac{8 \times 6}{14} + 2}$$

$$= \frac{2 \times 4.42}{8.42}$$

$$= \frac{8.84}{8.42}$$

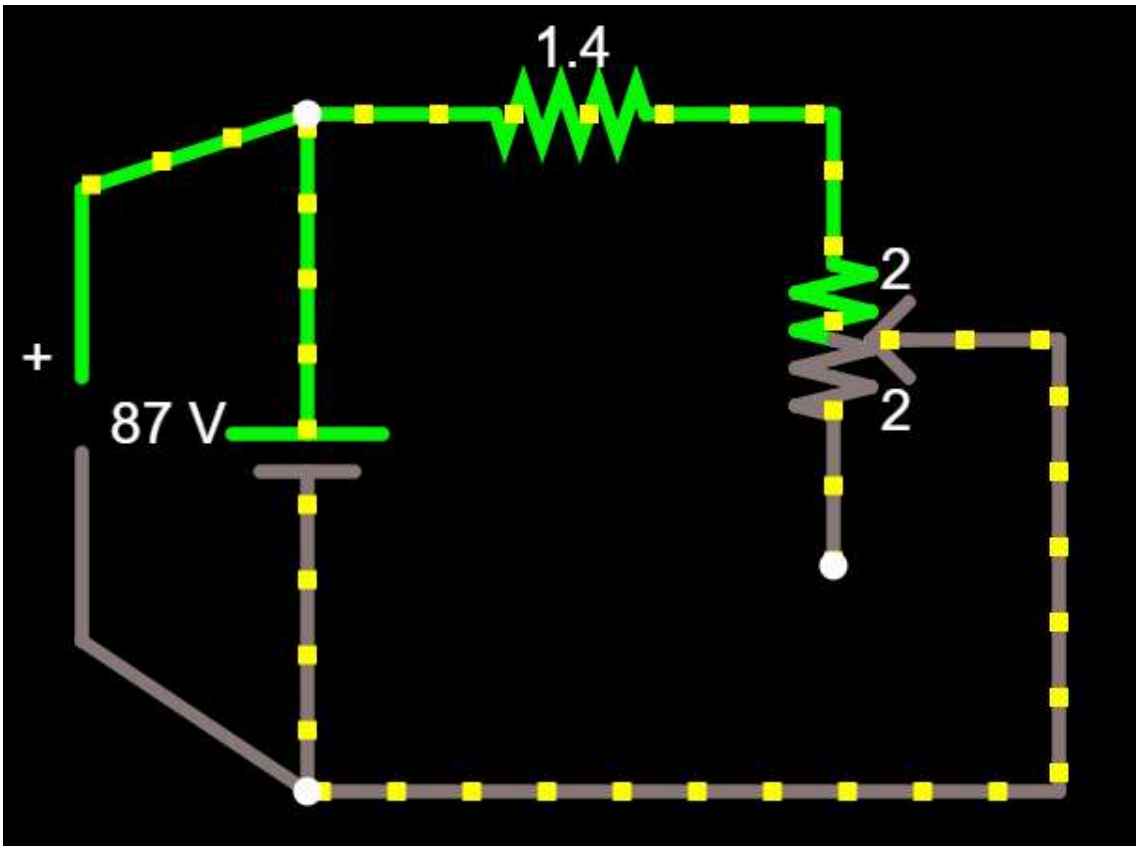
$$R_L = 1.378\ \Omega$$

For Maximum Power Transfer

$R_L = R_{TH}$

∴ Plotting R v/s P graph

R	P (mW)
0.7	1.218
1.4	1.375
2.1	1.325
2.8	1.215
3.5	1.116



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0.7	1.218
1.4	1.375
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