

**“How to figure the resistance in a Parallel Circuit”**

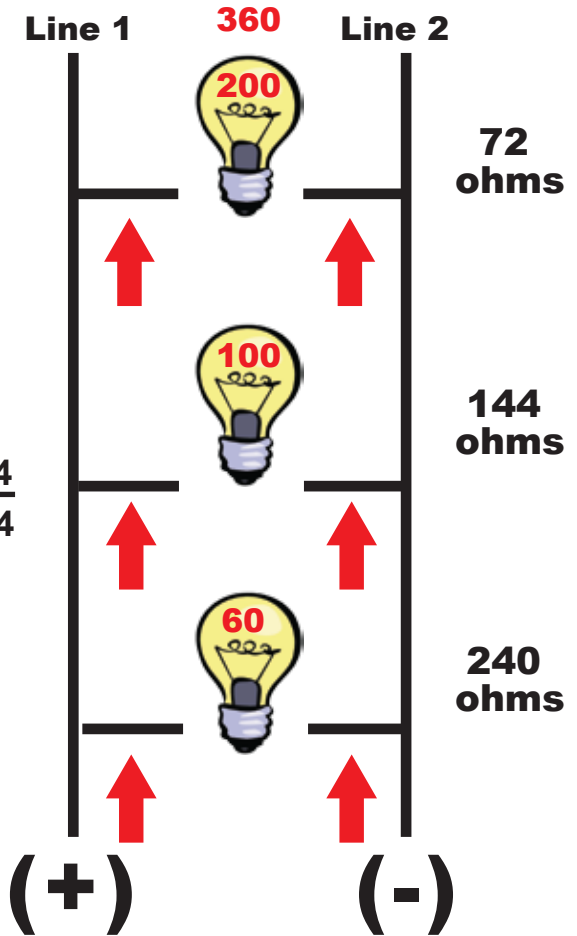
**Parallel Circuits** The total resistance is equal to the reciprocal of X where:  $X = 1/R_1 + 1/R_2 + 1/R_3$

$$X = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$$

$$\frac{1}{144} \times \frac{72}{72} \times \frac{240}{240} + \frac{1}{72} \times \frac{144}{144} \times \frac{240}{240} + \frac{1}{240} \times \frac{72}{72} \times \frac{144}{144}$$

$$\frac{17,280}{2,488,464} + \frac{34,560}{2,488,464} + \frac{10,368}{2,488,464}$$

$$= \frac{62,208}{2,488,464} = \frac{1}{40} = \frac{40}{1}$$



**R = 40 ohms**

