**Calculating Resistance.**

**Since parallel circuits and series circuits create different amounts of resistance, there are two different equations.**

**Series: add the resistance of each of the resistors.**

**1 ohm 2 ohms**

**3 ohms**

**Resistance = 1 + 2 + 3 = 6 ohms**

**The resistance of a parallel circuit is calculated by adding the reciprocal (made by putting 1 over the resistance) of the resistors.**

**1 ohm**

**2 ohms**

**3 ohms**

**1/resistance = 1/1 + ½ + 1/3**

**1/resistance = 1 + .5 + .3**

**1/resistance = 1.8**

**Resistance = 1 / 1.8 = .55 ohms**