**Parallel Circuits Problem Solving**

**VT = V1 = V2 = ...**

**IT = I1 + I2 + ...**

**1 = 1 + 1 + ...**

**RT R1 R2**

Total Resistance **RT** is also known as Equivalent Resistance **Req.**

Equivalent Resistance **Req**is what you determine in order to replace all of the resistors in a circuit with just **1** resistor.

**1)** Find the equivalent resistance of this circuit: \_\_\_\_\_\_\_\_\_\_

**2)** Find the equivalent resistance of this circuit: \_\_\_\_\_\_\_\_\_\_

**3)** Find the equivalent resistance of this circuit: \_\_\_\_\_\_\_\_\_\_

What happens to total resistance in a parallel circuit as resistors are added? \_\_\_\_\_\_\_\_\_\_\_

Why?

**4)** Solve for R2 in the following circuit: \_\_\_\_\_\_\_\_\_\_

**4)** Solve for all values in the following circuit: