Parallel Circuits

Name: _____

	Battery Voltage	Current		Voltage Drop	Calculated Resistance (V drop/ Br.Current)	Total Resistance (Batt. V/ OverallCurrent)
		Overall	Branch Current			
	(V)	(A)	(A)	(V)	(Ω)	(Ω)
Single Branch Parallel Circuit						
Two Branch Parallel Circuit				#1		
				#2		
Three Branch Parallel Circuit				#1		
				#2		
				#3		

Right click on the resistors to change the resistance to the values below.

Total Resistance

Complex 20 & 30 Ω				#1	10	
				#2	10	
				#3	20	
					30	

Short Circuit				#1	10	
				#2	10	
				#3	20	
					30	
				Short	0	

What is the relationship between the battery voltage and the voltage drops?

How do the currents compare in a parallel circuit?

A) What happens to the overall current as more branches are added to the circuit?

B) How does the branch current compare as resistors are added within the branch?

What is the relationship to the total resistance and the individual resistors?