Renton Technical College
Commercial Building & Industrial Engineering
Fundamentals of Electricity
Winter 2011

Series Circuits	Parallel Circuits
Resistance (measured in ohms, Ω)	
$R_T = R_1 + R_2 + R_3 + \ldots$	$R_T = \frac{1}{\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}}$
Voltage (measured in volts, V)	
$E_T = E_1 + E_2 + E_3 + \ldots$	$E_T = E_1 = E_2 = E_3 = \ldots$
Current (measured in amperes, A)	
$I_T = I_1 = I_2 = I_3 = \ldots$	$I_T = I_1 + I_2 + I_3 + \ldots$
Power (measured in watts, W)	
$P_T = P_1 + P_2 + P_3 + \ldots$	$P_T = P_1 + P_2 + P_3 + \ldots$