

Chapter 7

Relating Current and Voltage

7.1 $1200\ \Omega$ [Note: I got a value of about $200,000\ \Omega$ using the meters in lab when my hand was very dry (which raises the resistance significantly); consequently, sticking my hand in a outlet (for an instant) will only give me a nasty shock (hopefully)]

7.2 $17\ \Omega$ across A and $33\ \Omega$ across B

7.3 $1.2\ \text{V}$

7.4 $4\ \text{J}$

7.5 $1.50\ \text{V}$, $1.40\ \text{V}$, $1.40\ \text{V}$

7.6 $1.482\ \text{V}$, $1.482\ \text{V}$, $25.55\ \Omega$, $4.84\ \text{A}$