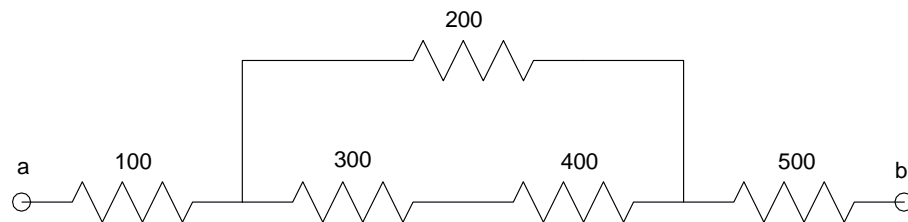


EE 206 Test #1 - Name _____

February 8, 2019

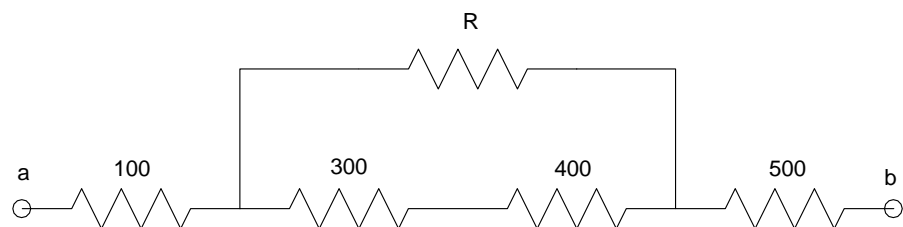
1a) Determine the resistance R_{ab}

$R_{ab} =$

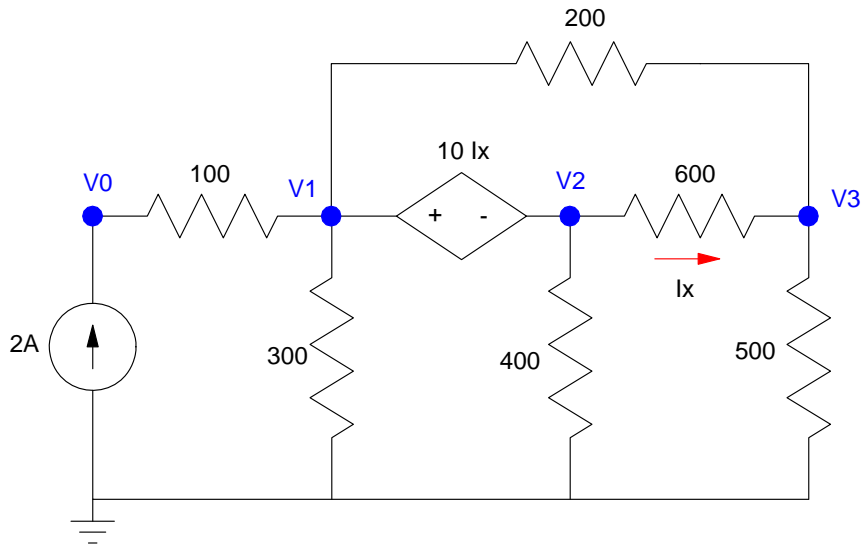


1b) Determine R so that $R_{ab} = 700$ Ohms

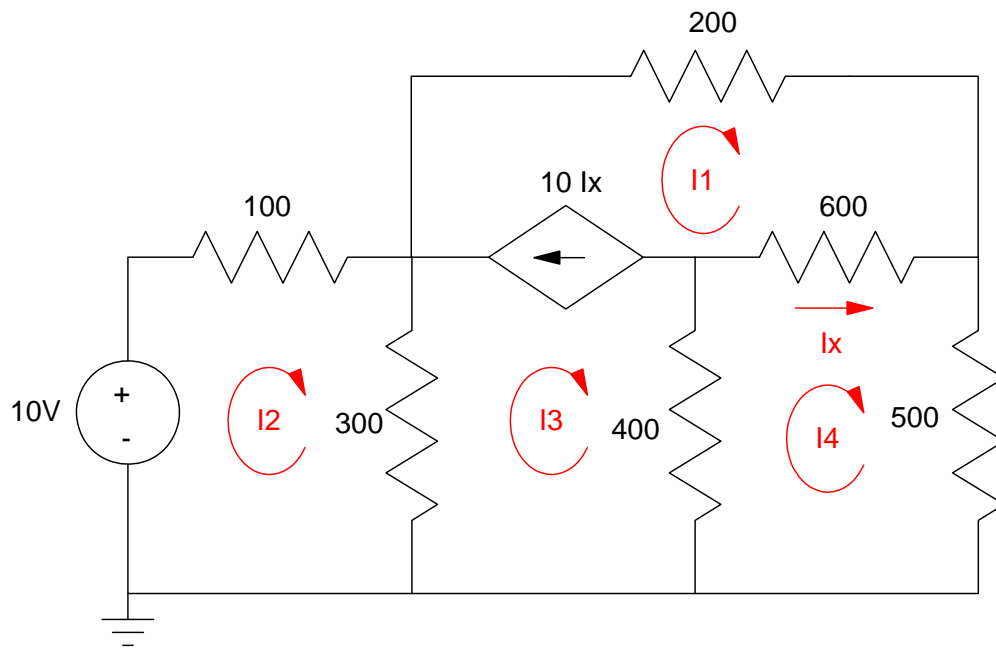
$R =$



2) Write N equations to allow you to solve for the N unknown voltages

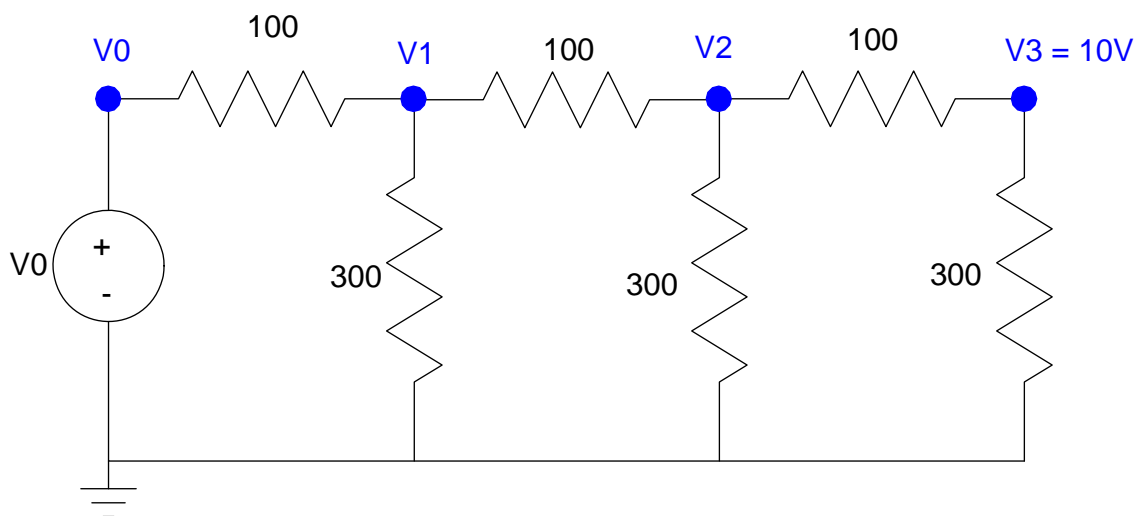


3) Write N equations to allow you to solve for the N unknown currents



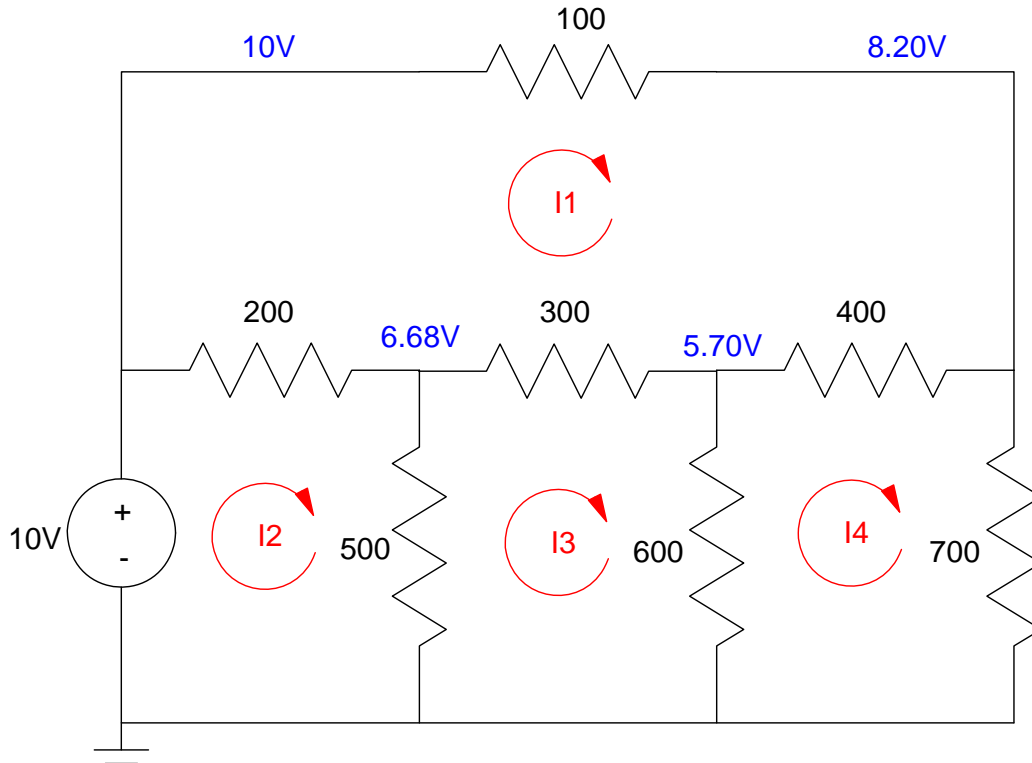
4) For the following circuit, the voltage at V3 is measured as 10V. Determine the voltages V0, V1, V2
(hint: use voltage division)

V0	V1	V2	V3
			10.0V



5) Given the voltages, determine the loop currents

I1	I2	I3	I4



Bonus: There are 300 million people in the United States. How many people does it take for their total wealth to equal the total wealth of the poorest 150 million?