Name: TA:

Parallel Circuit Drawing and Calculations

Recall and draw the symbols for the following circuit pieces.

Wire	Cell	Battery	Open Switch	Closed Switch
Resistor	Ammeter	Voltmeter	Light Bulb/ Lamp	Ground

Draw a circuit diagram for the following scenarios. Remember that circuit diagrams should be drawn with straight lines.

Scenario 1: 1. Parallel Circuit (3 paths) 2. One (9V) battery 3. 1 light bulb on each path 4. One resistor (anywhere you like) 5. One open switch 6. One closed switch	
Scenario 2: 1. Parallel Circuit (2 paths) 2. One motor 3. 1 light bulb on the first path 4. 2 light bulbs on the second path 5. One open switch 6. One closed switch	

Draw your own circuit!

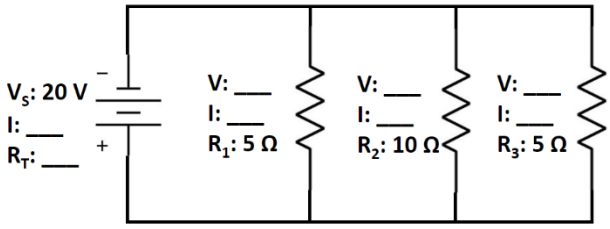
In the space below, draw any circuit you would like. Use any symbols you like! It must contain at least 7 symbols. Label **ALL** of the parts. **Extend:** Put in numbers for voltage, current, and resistance that make sense for the diagram!

Parallel circuit practice problems: For each figure below complete the table to find the current, resistance, voltage and power across each resistor. **Show ALL your work!**

Name: TA:

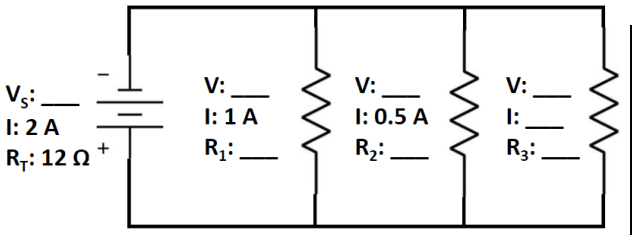
a)

Resistor	V (V)	I (A)	R (Ω)
1			5 Ω
2			10 Ω
3			5 Ω
Battery	20 V		



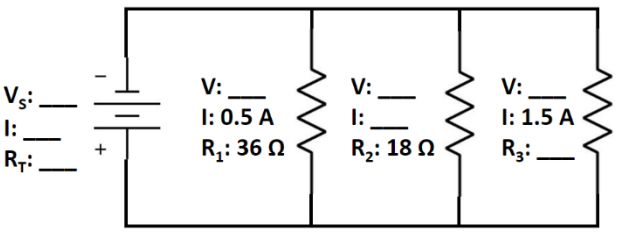
b)

Resistor	V (V)	I (A)	R (Ω)
1		1 A	
2		0.5 A	
3			
Battery		2 A	12 Ω



c)

Resistor	V (V)	I (A)	R (Ω)
1		0.5 A	36 Ω
2			18 Ω
3		1.5 A	
Battery			



d)

Resistor	V (V)	I (A)	R (Ω)
1		2 A	
2		3 A	
3		4 A	
Battery			4 Ω