Isabella and Molly

Analysis:

1. As the resistance increased, the current through the resistor decreased. Is there a proportional relationship between resistance and current? If so, write an equation for the relationship, including the constants as given by your curve fit.

   The current and resistance are inversely proportional. $I = A/C$

2. How do the constants in your equation relate to the equipment you used in the experiment?

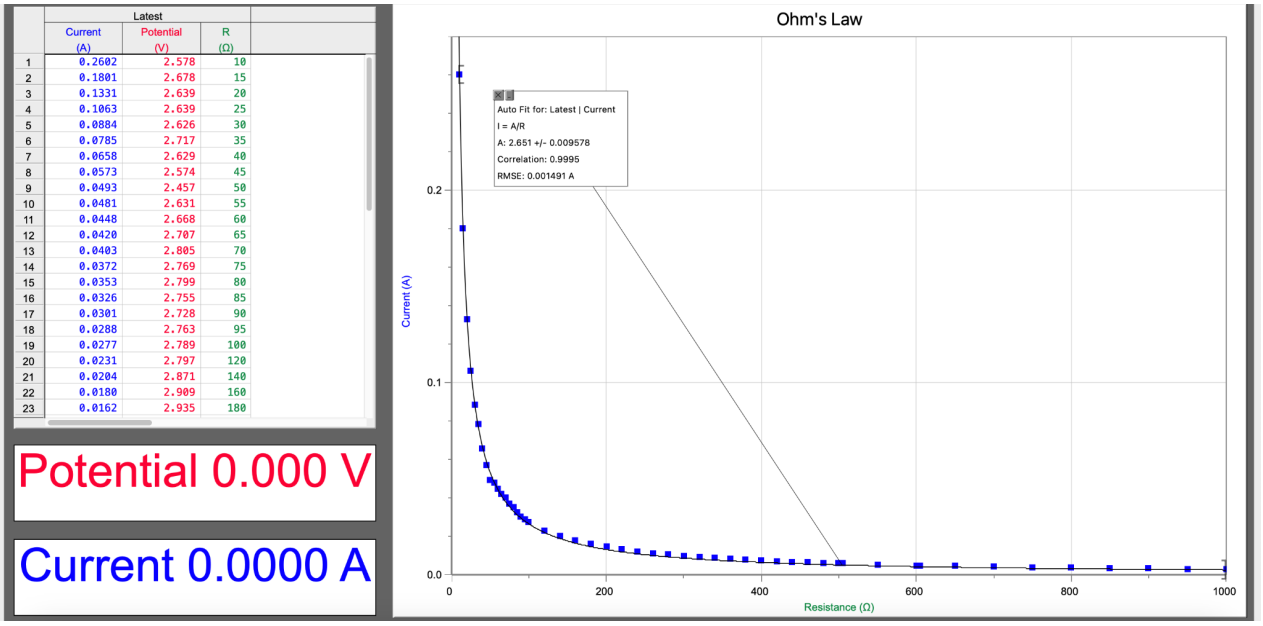
   The constant in the equation, A represents how we never changed the number of batteries or their voltage throughout the experiment.

3. Do your results confirm Ohm's Law ?(you will need to look up the law)

   Yes our results match Ohm's law (V = IR)

4. Discuss (in a short paragraph if this is an informal lab report) possible sources of error. Why isn't your curve-fit perfect? And/or why didn't your equation match Ohm's Law? Etc.

   Our graph fit pretty well, but of course it wasn't perfect. We noticed in our data that although the batteries remained constant throughout the experiment, the voltage actually increased with every trial.



Latest

	Current (A)	Potential (V)	R (Ω)
1	0.2602	2.578	10
2	0.1801	2.678	15
3	0.1331	2.639	20
4	0.1063	2.639	25
5	0.0884	2.626	30
6	0.0785	2.717	35
7	0.0658	2.629	40
8	0.0573	2.574	45
9	0.0493	2.457	50
10	0.0481	2.631	55
11	0.0448	2.668	60
12	0.0420	2.707	65
13	0.0403	2.805	70
14	0.0372	2.769	75
15	0.0353	2.799	80
16	0.0326	2.755	85
17	0.0301	2.728	90
18	0.0288	2.763	95
19	0.0277	2.789	100
20	0.0231	2.797	120
21	0.0204	2.871	140
22	0.0180	2.909	160
23	0.0162	2.935	180

Potential 0.000 V

Current 0.0000 A