

ENGR142 Grade Report: Sensor Circuit CFU

Name	Kathryn Atherton	Total Points Earned	4.5
Team	45	Total Points Possible	10
Grader	Peter Jones	Percentage Earned	45.0%

Grading System Message(s)	Team High Assignment Grade
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Does program:	Pass	Part.	Fail
Vac = 10V and Vad = 0V	1	0.5	0
Vaf = 10V and Vbe = 0 V	1	0.5	0
Iabc = 1A and Ief = 1A	1	0.5	0
Ibattery = 2	1	0	0
2a) Show relevant circuit (voltage divider or wheatstone bridge) - Indicated where the sensor is in the circuit and which TP in the circuit voltage will be measured.	2	1	0
2b) Indicate resistor relationship of value in series (R1) with the sensor resistance (Rs). Option 1) Voltage divider - Indicates that R1 is ~ Rs. As R1 increase the range of Vs decreases Option 2) Wheatstone bridge - R1 > Rs max will provide a voltage that goes negative to positive. Or R1 close to RX min will provide a value of 0 at Rs min.	2	1	0
2c) (Voltage Divider Option) Draws a graph of Vs and Temperature with a line passing through 0 T at a VS value that is half the range of Vs at Tmin and Tmax	2	1	0
Subtotal		4.5	of 10

Test Case 1				
Input	Output	Pass	Part.	Fail
		0	NA	0
Subtotal		0	of 0	
Total		4.5 of 10		

Grader Comments
All calculations were wrong because 4 was accidentally substituted for 5 in one of the resistors. R1 > Rs max will provide a voltage that goes negative to positive. Or R1 close to RX min will provide a value of 0 at Rs min. The graph was incorrect.