8. Next, use the hypothetical water quality data you looked at in questions number 1 and 2 and evaluate it using your drinking water quality index table. Which creek would be better for drinking water? Is this the same creek that would be better for trout habitat? Does this make sense, given how the two water quality index tables were constructed?

Whatever your answer, you to be able to
a) justify your response
b) tell me what the water quality index score predicts

Note that your "gut" response is, the water quality index score might be different. If you see this, we might end up revising our water quality index table.

GPA ① ~~3.87~~ ~~3.27~~ 2.9

GPA ② ~~2.85~~ 3.40

we know student 2 is a better student...

① GPA is more influenced by 0.5 credit than 0.25 credit

② GPA is more influenced by difficult classes

Some water will be good for some purposes but poor for others. Water good for trout may be bad for drinking.

9. Finally, try to make another water quality index table – this time, for recreational purposes (swimming). You might need to do some research into what water quality parameter values are ideal, OK, and poor for swimming. (You can assume that the water being collected is from a stream or a lake that is deep enough for swimming.)

	~~DO~~	temp	pH	turbidity
how important? (1=super, 4=not)	~~4~~	2	3	1
ideal range?	X	70-84°F	6-8	0-100 NTU

	excellent		good/ok		poor	
turbidity	0-100 NTU	20	100-300 NTU	10	>300	0
temp.	70-84°	15	60-70° F 84-90° F	7	<60° >90°	0
pH	6-8	10	4-6 8-10	5	<4 >10	0

	excellent		good/ok		poor		FOR
turbidity	0-50 NTU	20	50-300 NTU	10	>300	0	Swimming
temp.	70-85°	15	60-70° F 85-90° F	7	<60° >90°	0	
pH	6-8	10	4-6 8-10	5	<4 >10	0	

	turb	temp.	pH	Index Score	Votes
Lake A	120/10	63°/7	9/5	22	#3
Lake B	85/10	72°/15	6.8/10	35	#2
Lake C	22/20	85°/15	7/10	45	#1