Instructions for Calculating Group Evaluation Multiplier

Guidance on Student Responses:

Note that each student must:

1. Provide a score for themselves as well as every member of their group. Note that they may list a group member as "NA" instead of -2 if the group member contributed absolutely nothing to the project.

2. Ensure that all group project scores add to zero.

3. Ensure that only integer values are used in the calculations.

If a student's ratings violate any of these conditions, deduct half points for that question (1.5 points) and provide an explanation in the assignment comments. Students must also provide a justification for why they ranked anyone something besides zero. Please be sure that the students provide a meaningful answer to this question (and deduct points if the answer is not sufficient).

- If a student's scores do not sum to zero, please override their ratings to be all zeros.

- If a student uses decimal values, round down to the nearest integer (i.e. 0.5 and -0.5 would become 0, -1.5 would become -1, and 1.5 would become 1),

- Any other violations of policy would cause a student's ratings to become all zeros.

Guidance on Rating Calculation:

Let's assume that Brennan is in a group with three other students named Bill, Kait, and Sally. Suppose that we all gave the following correctly formatted rankings.

Brennan		Bill		Kait		Sally	
Brennan	0	Bill	0	Kait	1	Sally	-1
Bill	-1	Brennan	0	Brennan	1	Brennan	0
Kait	2	Kait	0	Bill	-1	Bill	0
Sally	-1	Sally	0	Sally	-1	Kait	1

Using this information, I would create the following matrix where I populate each **row** with the persons vote corresponding to that row: i.e.

	Brennan	Bill	Kait	Sally
Brennan	0	-1	2	-1
Bill	0	0	0	0
Kait	1	-1	1	-1
Sally	0	0	1	-1

Note that the rows must sum to zero. The multiplier score is determined by taking the column sum **minus the diagonal elements.** This prevents a student from affecting their grade with their

own ratings. Thus, the raw column sums and adjusted column sums (subtracting the diagonal element from each column) would be:

Scenario 1

	Brennan	Bill	Kait	Sally	Row Sum
Brennan	0	-1	2	-1	0
Bill	0	0	0	0	0
Kait	1	-1	1	-1	0
Sally	0	0	1	-1	0
Col Sum	1	-2	4	-3	
Col Adj	**1**	**-2**	**3**	**-2**	

With these ratings, no adjustments would be made to scores.

Scenario 2

Now suppose that the ratings were slightly different as shown below:

	Brennan	Bill	Kait	Sally	Row Sum
Brennan	2	-2	2	-2	0
Bill	0	0	0	0	0
Kait	1	-2	2	-1	0
Sally	0	0	1	-1	0
Col Sum	3	-4	5	-4	
Col Adj	**1**	**-4**	**3**	**-3**	

In this new scenario Brennan and Kait decided to give themselves more points and less points to Bill and Sally. Because this is a group of four, both Bill and Sally would receive a multiplier of 0.9, while Brennan and Kait would receive a multiplier of 1.0. Keep in mind that the threshold for multipliers is slightly different for a group of four than it is for a group of three.

Scenario 3

In one final scenario, suppose that Bill rates himself lower and gives more points to Kait.

	Brennan	Bill	Kait	Sally	Row Sum
Brennan	2	-2	2	-2	0
Bill	0	-2	2	0	0
Kait	1	-2	2	-1	0
Sally	0	0	1	-1	0
Col Sum	3	-6	7	-4	
Col Adj	**1**	**-4**	**5**	**-3**	

In this scenario, Bill and Sally still both receive multipliers of 0.9, while Kait now receives a multiplier of 1.1. Brennan still receives a multiplier of 1.0.