

## Feedback — Week4A (Basic)

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You submitted this quiz on **Mon 2 Mar 2015 7:23 PM PST**. You got a score of **2.00** out of **2.00**.

### Question 1

Here is a table of 1-5 star ratings for five movies (M, N, P, Q, R) by three raters (A, B, C).

	M	N	P	Q	R
A	1	2	3	4	5
B	2	3	2	5	3
C	5	5	5	3	2

Normalize the ratings by subtracting the average for each row and then subtracting the average for each column in the resulting table. Then, identify the true statement about the normalized table.

Your Answer	Score	Explanation
<input type="radio"/> The entry (B,N) is $-1/3$ .		
<input type="radio"/> The largest element is (C,P).		
<input type="radio"/> The entry (C,M) is $-5/3$ .		
<input checked="" type="radio"/> The smallest element is (C,R).	✓ 1.00	
Total	1.00 / 1.00	

### Question 2

Below is a table giving the profile of three items.

A	1	0	1	0	1	2
B	1	1	0	0	1	6
C	0	1	0	1	0	2

The first five attributes are Boolean, and the last is an integer "rating." Assume that the scale factor for the rating is  $\alpha$ . Compute, as a function of  $\alpha$ , the cosine distances between each pair of profiles. For each of  $\alpha = 0, 0.5, 1$ , and  $2$ , determine the cosine of the angle between each pair of vectors. Which of the following is FALSE?

Your Answer	Score	Explanation
<input checked="" type="radio"/> For $\alpha = 1$ , A is closer to B than C is.	✓ 1.00	
<input type="radio"/> For $\alpha = 0.5$ , B is closer to C than A is.		
<input type="radio"/> For $\alpha = 1$ , B is closer to A than C is.		
<input type="radio"/> For $\alpha = 2$ , B is closer to C than A is.		
Total	1.00 / 1.00	

