

## Feedback — Week 1 Quiz

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You submitted this quiz on **Sun 27 Dec 2015 1:00 AM PST**. You got a score of **10.00** out of **10.00**.

### Question 1

True or False: The fact that only 13% of genes in *S. cerevisiae* are duplicated does not rule out the possibility of a whole-genome duplication.

Your Answer	Score	Explanation
<input checked="" type="radio"/> True	✓ 1.00	
<input type="radio"/> False		
Total	1.00 / 1.00	

### Question 2

True or False: In practice, the number of clusters of biological data is typically not known in advance.

Your Answer	Score	Explanation
<input checked="" type="radio"/> True	✓ 1.00	
<input type="radio"/> False		
Total	1.00 / 1.00	

### Question 3

True or False: *MaxDistance* is less sensitive to outliers than the squared error distortion.

Your Answer	Score	Explanation
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☐ True

☒ False



1.00

Total

1.00 / 1.00

### Question 4

How many ways are there to cluster 6 points into two clusters?

You entered:

31

Your Answer	Score	Explanation
31	<div><div></div></div> 2.00	
Total	2.00 / 2.00	

### Question 5

True or False: The Lloyd algorithm is not guaranteed to converge for every collection of data points and every choice of initial centers.

Your Answer	Score	Explanation
<input type="radio"/> True		
<input checked="" type="radio"/> False	<div><div></div></div> 1.00	
Total	1.00 / 1.00	

### Question 6

Compute *MaxDistance(Data, Centers)* for the following *Data* and *Centers*:

*Data*: (2, 8), (2, 5), (6, 9), (7, 5), (5, 2)

Centers: (3, 5), (5, 4)

You entered:

Your Answer		Score	Explanation
5	✓	1.00	
Total		1.00 / 1.00	

## Question 7

Compute  $Distortion(Data, Centers)$  for the following *Data* and *Centers*:

*Data*: (2, 6), (4, 9), (5, 7), (6, 5), (8, 3)

*Centers*: (4, 5), (7, 4)

You entered:

Your Answer		Score	Explanation
6	✓	1.00	
Total		1.00 / 1.00	

## Question 8

Give the center of gravity of the following (three-dimensional) data points. Enter your answer in the form (x, y, z). (Please note the space between the coordinates.)

(17, 0, -4), (3, 14, 23), (9, 7, 16), (7, 3, 5)

You entered:

(9, 6, 10)

Your Answer		Score	Explanation
(9, 6, 10)	✓	2.00	
Total		2.00 / 2.00	