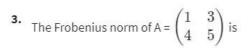
1.	Assume that your objective is to minimize the transformation of X as similar to Y as possible, what would you optimize to get R? $(XR \approx Y)$	1 / 1 point
	Minimize the distance between XR and Y	
	Maximize the distance between XR and Y	
	Minimize the dot product between XR and Y	
	Maximize the dot product between XR and Y	

2.	When solving for $R$ , which of the following is true?
	O Create a forloop, inside the forloop: (initialize R, compute the gradient, update the loss
	O Create a forloop, inside the forloop: (initialize R, update the loss, compute the gradient.
	Initialize R, create a forloop, inside the forloop: (compute the gradient, update the loss)
	O Initialize R, compute the gradient, create a forloop, inside the forloop: (update the loss)

1 / 1 point



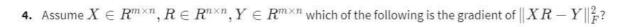
(Answer should be in 2 decimal places)

7.14

**⊘** Correct

7.14

1/1 point



1/1 point

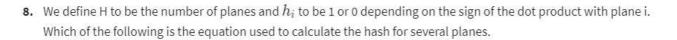
- $\bigcirc \ \tfrac{2}{m} X(XR-Y)$
- $\bigcirc \frac{2}{m}(XR-Y)X$
- $\bigcirc \ \ \tfrac{2}{m}(XR-Y)X^T$ 
  - ✓ Correct

This is correct.

	agine that you are visiting a city in the US. If you search for friends that are living in the US, would you be able determine the 2 closest of ALL your friends around the world?	
0		
	Yes, because I am already in the country and that implies that my closest friends are also going to be in the same country.	
•	No	
(	Correct This is correct.	

- $P:\begin{bmatrix}1\\1\end{bmatrix}$
- $V_1: \begin{bmatrix} 1 \\ 1 \end{bmatrix}$
- $V_2$ :  $\begin{bmatrix} 2 \\ 2 \end{bmatrix}$
- $V_3:\begin{bmatrix} -1 \\ -1 \end{bmatrix}$
- $\ \, \ \, \ \, PV_1^T$  and  $PV_2^T$  have the same sign.
- $\bigcap\ PV_1^T$  and  $PV_2^T$  are equal in magnitude.
- $\bigcap\ PV_1^T$  and  $PV_3^T$  have the same sign.
  - **⊘** Correct

Correct



1/1 point

$$igotimes \sum_i^H 2^i h_i$$

$$\bigcirc \sum_i^H 2^i h_i^i$$

$$\bigcirc \sum_{i}^{H} 2ih_{i}$$

$$igcirc$$
  $\sum_i^H 2^{h_i} i$ 

Correct.

6.	What is the purpose of using a function to hash vectors into values?	1 / 1 point
	✓ To speed up the time it takes when comparing similar vectors.	
	✓ To not have to spend time comparing vectors with other vectors that are completely different.	
	☐ To make the search for other similar vectors more accurate.	
	☐ It helps us create vectors.	

9.	How can you speed up the look up for similar documents.	1/1 point
	□ PCA	
	Approximate Nearest Neighbors	
	○ Correct     This is correct.	
	☐ K-Means	
	✓ Locality sensitive hashing	
	○ Correct     This is correct.	

10. Hash tables are useful because
✓ allow us to divide vector space to regions.
Correct This is correct.
✓ speed up look up
○ Correct     This is correct.
classify with higher accuracy
can always be reproduced
Correct You will always hash the same vector to the same bucket with the same hash function.

1 / 1 point