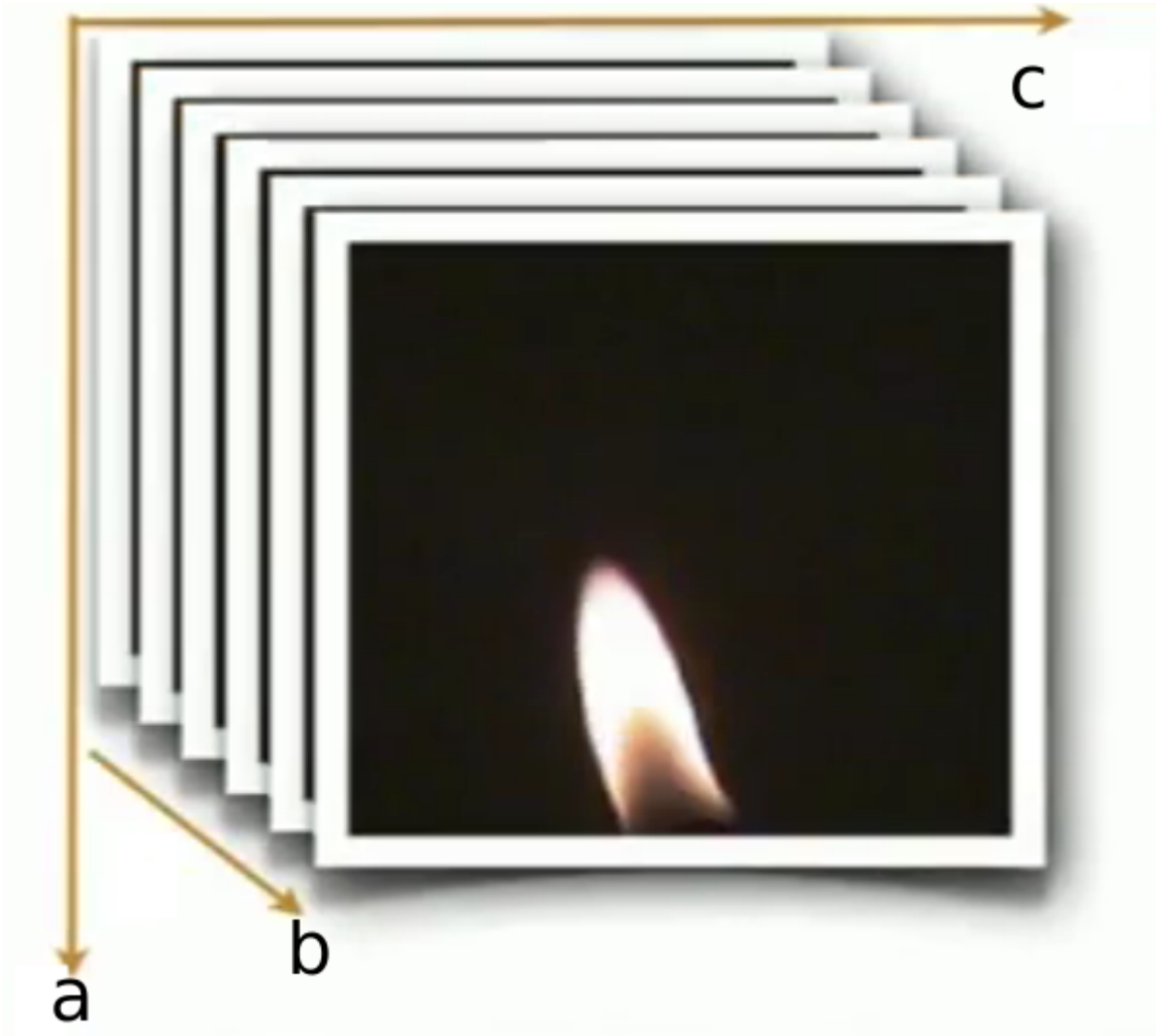
Feedback — Quiz 4

Help Center

You submitted this quiz on **Thu 25 Apr 2013 11:56 PM PDT**. You got a score of **7.00** out of **7.00**.

Question 1

Recall the following representation of a video:



Please choose the one option that accurately assigns a dimension to each character.

Your Answer		Score	Explanation
a - y b - t c - x	✔	1.00	Correct!
a - t			

b - y
c - x

○ a - x b - t c - y	
○ a - x b - y c - t	
Total	1.00 / 1.00

Question 2

At least how fast do images need to be refreshed in order for a human to perceive continuous motion without flicker?

Your Answer		Score	Explanation
◉ 24 times per second.	✔	1.00	Correct!
○ 12 times per second.			
○ 30 times per second.			
○ 60 times per second.			
Total		1.00 / 1.00	

Question 3

Please choose the one option that accurately describes a video texture.

Your Answer		Score	Explanation
The local gradient of a video.			
Playing any video in a loop.			
An infinite (possibly repeating) video without visible breaks.	✔	1.00	This option is correct!
The artifacts seen in video after compression.			
Total		1.00 / 1.00	

Question 4

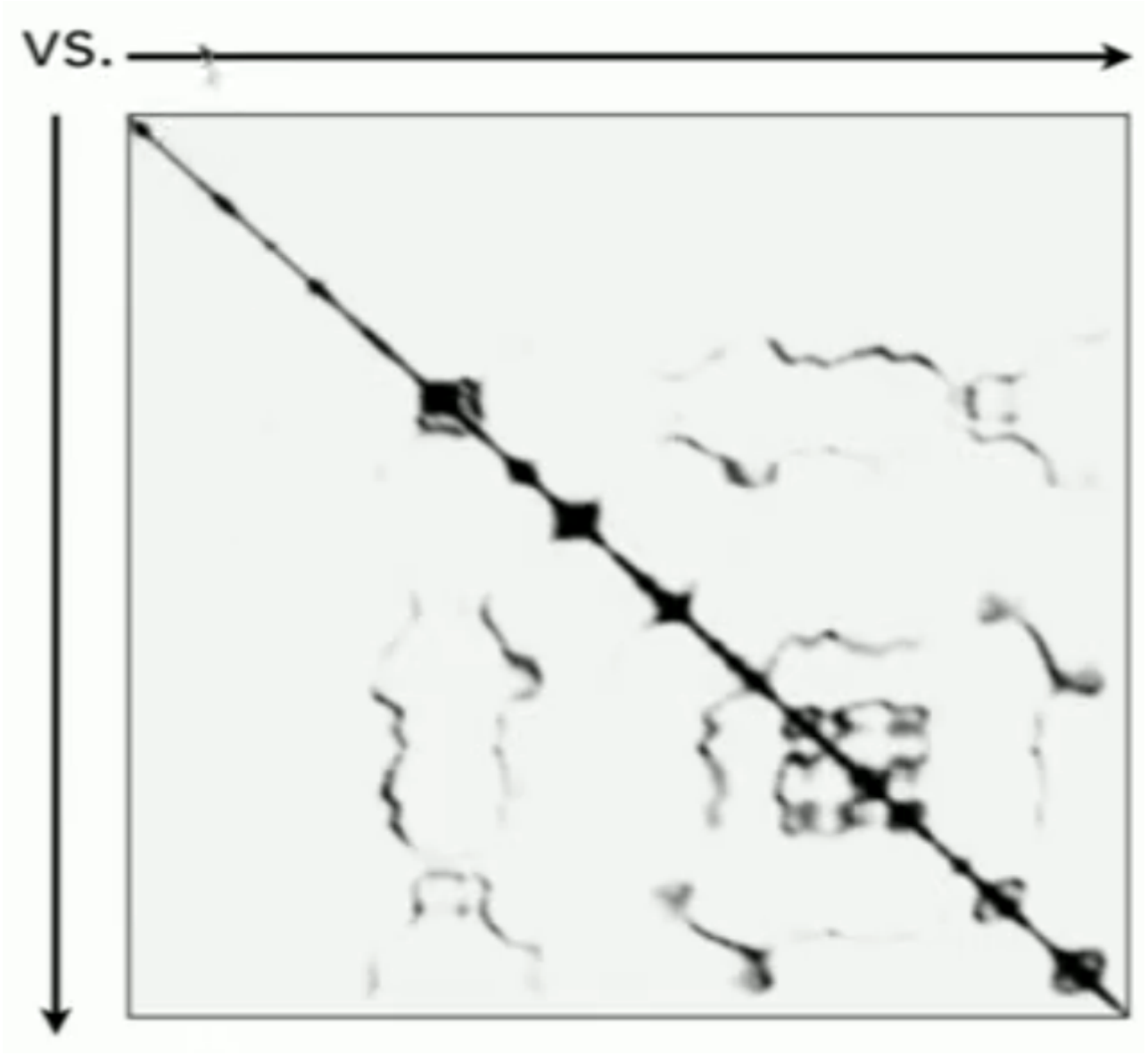
Choose the one option that accurately describes the idea behind the L2 norm.

Your Answer		Score	Explanation
The sum of differences of the corresponding pixels in two images.			
The difference in dimension of two images.			
The sum of squares of differences of the corresponding pixels in two images.	✔	1.00	This option is correct!
The difference of the averages of two images.			

Total	1.00 / 1.00

Question 5

Recall the following image of a similarity matrix from lecture:



Please choose all of the options that accurately describe this diagram.

Your Answer		Score	Explanation
☐ Black pixels represent frames that are different, while white pixels represent frames that are similar.	✔	0.12	

☑ The pixels on the diagonal identify frames that are close to each other in time.	✔	0.12	This option is correct.
☑ Black pixels represent frames that are similar, while white pixels represent frames that are different.	✔	0.12	This option is correct.
☑ The rows and columns index frame numbers.	✔	0.12	This option is correct.
☐ The pixels on the diagonal identify frames that are far from each other in time.	✔	0.12	
☐ The rows and columns index the width and height of each frame in the video.	✔	0.12	
☐ The intensity of each pixel represents the difference in time of the frames.	✔	0.12	
☑ The intensity of each pixel represents the similarity of the corresponding frames.	✔	0.12	This option is correct.
Total		1.00 / 1.00	

Question 6

Please identify all of the parameters of the plenoptic field P.

Your Answer		Score	Explanation
☑ x, y, z of the viewing point	✔	0.12	This option is correct!
☐ V - the size of the sensor	✔	0.12	This option is not correct.
☐ s - the shutter speed	✔	0.12	This option is not correct.
☐ a - the aperture	✔	0.12	This option is not correct.

☑ t - the time	✔	0.12	This option is correct!
☑ lambda - the wavelength of the light beam	✔	0.12	This option is correct!
☐ f - the focal length	✔	0.12	This option is not correct.
☑ theta and thy - the orientation of the light beam	✔	0.12	This option is correct!
Total		1.00 / 1.00	

Question 7

Please choose the one option that describes the benefit of using eccentric aperture and adding miniature pinholes at the image plane.

Your Answer		Score	Explanation
○ It allows us to capture sharper images regardless of where the object is in the scene.			
◉ It allows us to encode the distance of objects in the scene, and the direction of light hitting the image plane.	✔	1.00	This option is correct.
○ It allows us to capture images using less light.			
○ It allows us to fully capture the plenoptic function.			
Total		1.00 / 1.00	