You are taking "Exam (Timed, No Correctness Feedback)" as a timed exam. Show more

End My Exam 44:56:23

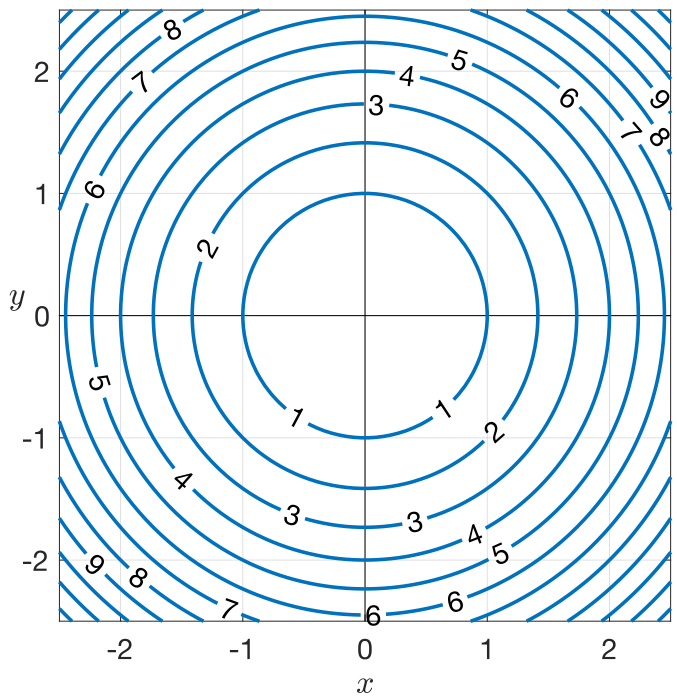
8. Hikers in a canyon

Bookmark this page

Discuss

Hiker 1

Recall the paraboloid described by $f(x,y) = x^2 + y^2$ whose level curves are given by concentric circles shown below.



Suppose that this paraboloid represents a canyon in which two people are hiking. Use the level curves above to answer the following (ungraded) poll question. After you answer the poll, use the forum to discuss your reasoning and hear from fellow learners.

HIKERS IN A CANYON POLL

Hiker 1 starts at the point $(-1, 1)$ and moves in the positive x direction. Is the hiker moving uphill, downhill, or neither?

RESULTS

Uphill	**23%**
Downhill	**65%**
Neither	**12%**

Submit

Results gathered from 1141 respondents.

8. Hikers in a canyon

Topic: Unit 1: Functions of two variables / 8. Hikers in a canyon

Hide Discussion

Add a Post

Show all posts by recent activity

Downhill. 3
The hikers begin very near the edge of the second ring. As the hikers move towards x=0, they get closer to the first ring. Assuming c...

The origin 0 is the lowest point, so ...
Since it is a paraboloid, in either X or Y direction when one is moving closer to 0 (the bottom) he is going d...

Calculator Hide Notes

an explanation of my answer My answer is downhill , then uphill, if you count the value zero or value right after of right below. We are told that Hiker 1 began hikin...	1
Hikers in a canyon From point (-1,1) to point (0,1) the hiker is moving downhill and from point (x, 1), x>0, he moving uphill.	1
Downhill first, then uphill	15
HIKERS At the same level till (1, 1) then downhill	1
My understanding of the question and answer If the hiker moves in the positive x-axis direction, the points go from f(-1,1) to f(0,1) to f(1,1) which translates into level curve 2 to 1 an...	3
Radius but also height It is important to remember that "k" is not olnly the radius of the circle, but also the height. Thus the smaller is k (the radius), the sm...	1
Got it wrong the first time I actually thought it was uphill at first. I first thought of the f(x,y)=k thingy to be shifting the graph **up** by k and then drawing the i...	1 new
Pool question	5
Hikers in Canyon Hiker 1 will start at an altitude of 2 go down to 1 and up to 2. f(-1,1)=2,f(0,1)=1,f(1,1)=2	2

Previous Next

Calculator Hide Notes