

Quiz 2

Be sure to follow the quiz instructions in order to avoid a deduction in points. Submissions are due in Gradescope by 11:59pm on Friday; no late work is accepted.

Name:

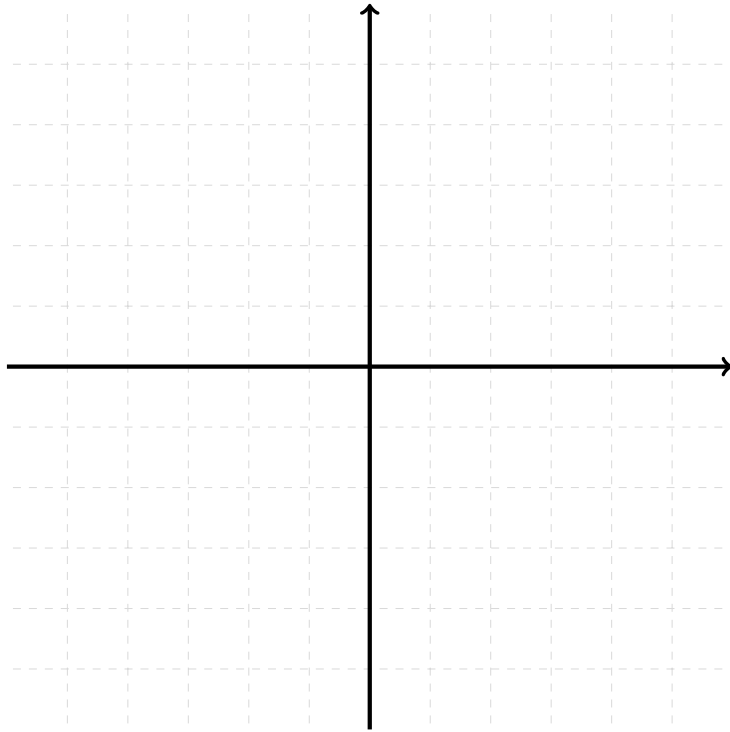
Question #1: Find the value of the limit.

$$\lim_{(x,y) \rightarrow (9,4)} \frac{\sqrt{x} - \sqrt{y+5}}{x - y - 5}$$

Name: _____

Quiz 1

Question #2: Draw a contour map on the axes provided including all five of the level curves $g(x, y) = c$ for the function $g(x, y) = x - y - 2$, $c = -2, -1, 0, 1, 2$. For full credit show your work for how you find the equation of each level set, include labels for the axes, and label each level set as well as the x -intercept and y -intercept of each level set.



Name:

Quiz 1

Question #3: Show that the limit does not exist by using the Two-Path Test.

$$\lim_{(x,y) \rightarrow (0,0)} \frac{x^3 y}{x^6 + y^2}$$