



End My Exam

19:15:26

You are taking "Exam (Timed, No Correctness Feedback)" as a timed exam. The timer on the right shows the time remaining in the exam. To receive credit for problems, you must select "Submit" for each problem before you select "End My Exam". **Show Less**

[Course](#) > [Exam](#) > [Exam \(... > 8. Exa...](#)

## 8. Exam (3 questions)

Exam due Oct 15, 2021 21:30 IST Completed

### 8 (a)

1 point possible (graded, results hidden)

Let  $f(x, y) = xy^3 - x^2y - x + 5$ .

Compute  $f_x(x, y)$  and  $f_y(x, y)$ .

$$f_x(x, y) = \text{y^3-2*x*y-1}$$

$$f_y(x, y) = \text{3*x*y^2-x^2}$$

? INPUT HELP

Submit

**i** Answer submitted.

### 8 (b)

1 point possible (graded, results hidden)

As above, let  $f(x, y) = xy^3 - x^2y - x + 5$ .

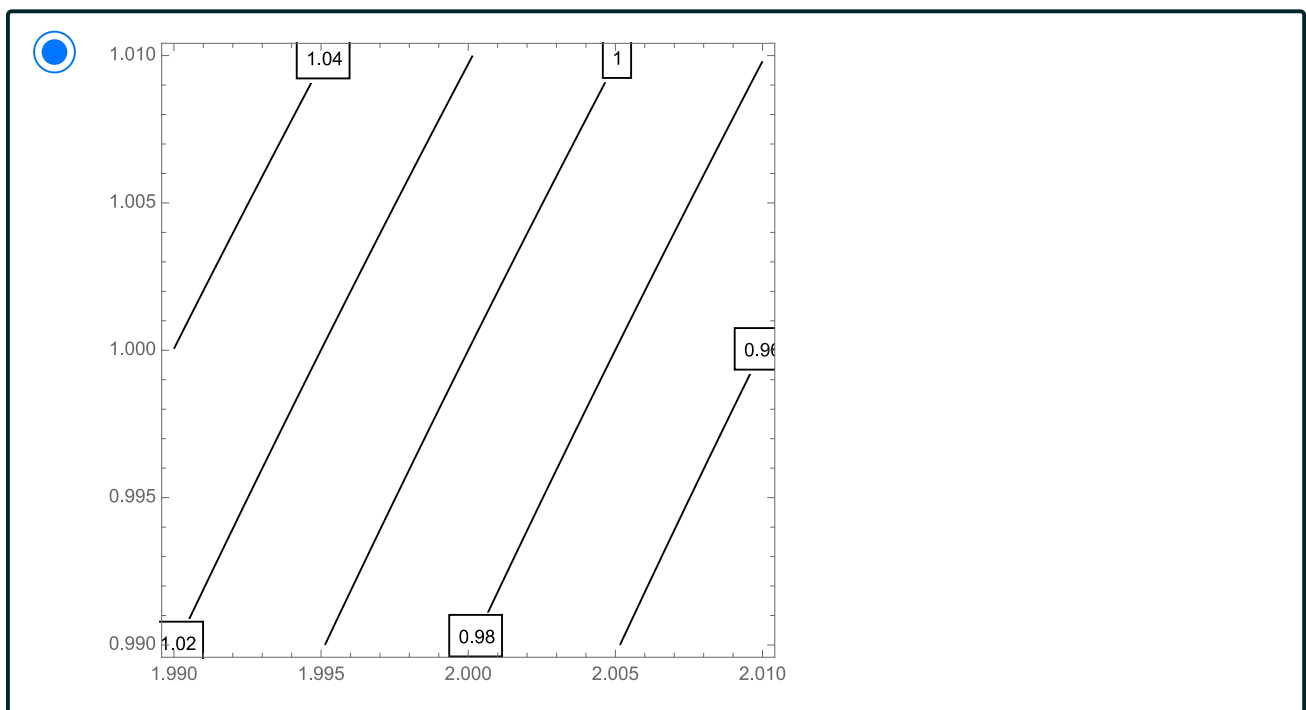
If we start at the point  $(2, 1)$  and increase  $x$  a little, does the function  $f$  increase, decrease or stay the same?

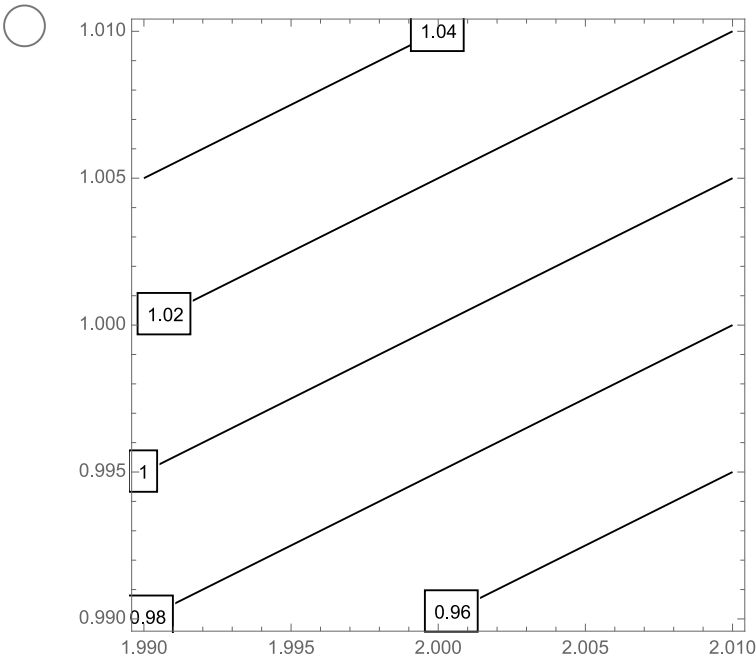
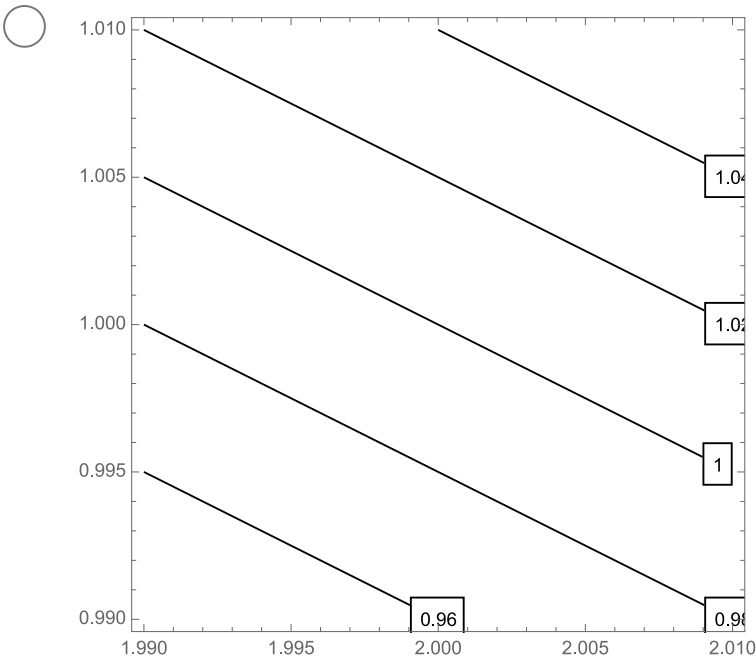


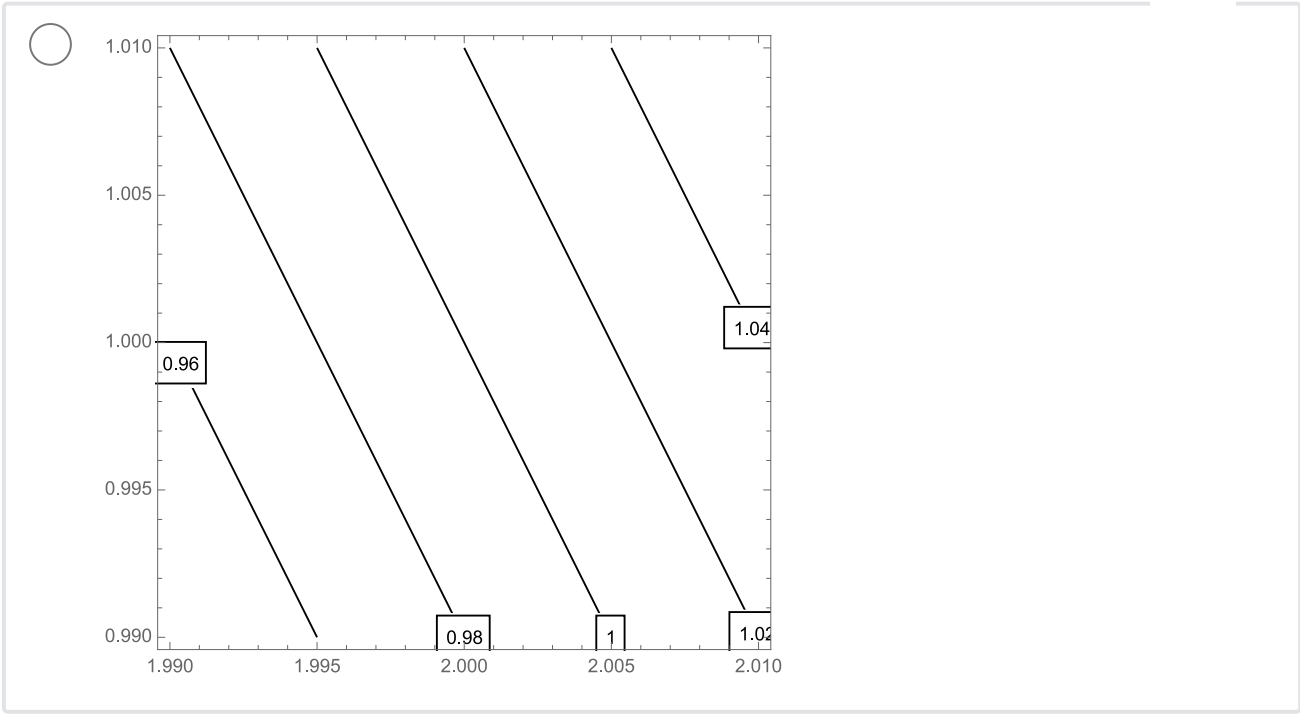
☐ increase☒ decrease☐ stays the same**Submit****i** Answer submitted.

8 (c)

1 point possible (graded, results hidden)

As above, let  $f(x, y) = xy^3 - x^2y - x + 5$ .Which of the following pictures shows the level curves of  $f$  in a small box around  $(2, 1)$ ?





Submit

**i** Answer submitted.

# 8. Exam (3 questions)

Hide Discussion

Topic: Exam / 8. Exam (3 questions)

Add a Post

Show all posts

by recent activity

There are no posts in this topic yet.

