

MATH 2242-090 — Spring 2016 — Dr. Clontz — Quiz 4

Name: _____

- Each quiz question is labeled with its worth toward your total quiz grade for the semester.
- On multiple choice problems, you do not need to show your work. No partial credit will be given.
- On full response problems, show all of your work and give a complete solution. When in doubt, don't skip any steps. Partial credit will be given at the discretion of the professor.
- This quiz is open notes and open book.
- This quiz is due at the end of class. Quizzes submitted over one minute late will be penalized by 50%.

1. (10 points) Give an approximate value of $f(1.1, -2.1)$ given the following information about f :

$$f(1, -2) = 3$$

$$\frac{\partial f}{\partial x}(1, -2) = 1$$

$$\frac{\partial f}{\partial y}(1, -2) = -2$$

$$\frac{\partial^2 f}{\partial x^2}(1, -2) = 0$$

$$\frac{\partial^2 f}{\partial y^2}(1, -2) = 3$$

$$\frac{\partial^2 f}{\partial x \partial y}(1, -2) = 1$$