

"QUIZ" for Lecture 12

NAME: (print!) SAL EMBAR Section: 23

E-MAIL SCANNED .pdf OF COMPLETED QUIZ to DrZcalc3@gmail.com (Attachment: q12FirstLast.pdf) ASAP BUT NO LATER THAN Oct. 19 8:00pm

1. Calculate the iterated integral

$$\int_1^2 \int_{-1}^1 (x + y^2) dx dy .$$

$$\int_{-1}^1 (x + y^2) dx = 2y^2$$

$$\int_1^2 2y^2 dy = 14/3$$

2. Calculate the double integral

$$\iint_R \frac{x^2 y}{x^2 + 1} dA ,$$

$$R = \{(x, y) \mid 0 \leq x \leq 1, -1 \leq y \leq 1\} .$$

$$\int_{-1}^1 \frac{x^2 y}{x^2 + 1} dy = 0$$

$$\int_0^1 0 dx = 0$$