

MATH 152 Quiz 5

Name: _____

Class time: _____

Show all work . 5 points each.

1) Evaluate the total differential of $z = x^2y + y^2x$ at the point $(1, 2)$ with $\Delta x = .01$ and $\Delta y = .02$. You do not need to simplify your answer.

2) Evaluate the double integral.

$$\int_0^1 \int_0^y (x^2 + y) dx dy$$