NAME: (print!) LiuyangShan

Section: <u>24</u>

E-MAIL SCANNED .pdf OF COMPLETED QUIZ to DrZcalc3@gmail.com (Attachment: q18FirstLast.pdf) ASAP BUT NO LATER THAN Nov. 9, 8:00pm

1. Let *C* be the line segment from (0, 1) to (2, 3), find $\int_C xy \, ds$.

$$\int_{0}^{1} 4\sqrt{2}t(1+2t)dt = \frac{14\sqrt{2}}{3}$$

2. Evaluate

$$\int_C xy^2 dx + x^2 y \, dy \quad ,$$

where *C* is $x : t^2$, $y = t^3$, $0 \le t \le 1$.

$$\int_0^1 5t^9 dt = \frac{1}{2}$$