

You must show **all** work to receive full credit. All work is to be your own.

October 5

This is a closed books and notes test. Be organized. Total points: **20**

19:44- 19:57

1. §10.4 Evaluation of Line Integrals by Green's Theorem. Using Green's Theorem, evaluate  $\oint_C \mathbf{F}(\mathbf{r}) \cdot d\mathbf{r}$  counterclockwise around the boundary curve  $C$  of the region  $R$ , where  $\mathbf{F} = [x \cosh 2y, 2x^2 \sinh 2y]$ ,  $R: x^2 \leq y \leq x$ . 20 points