

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.

20 points

Using Green's Theorem, evaluate  $\int_C y^3 dx - x^3 dy$  counterclockwise around the boundary curve

$C$  of the region  $R$ , where  $C$  is the circle  $x^2 + y^2 = 4$ .