Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Quiz**

1. Answer the following questions ***and*** provide a reason for your answer:
2. Can you apply the Fundamental Theorem of line integrals to ?
3. Can you apply the Fundamental Theorem of line integrals to ?
4. Can you apply Green’s theorem to a curve C, which is a straight line from (0,0,0) to (1,2,3)?
5. Evaluate the following integrals, using whatever method/shortcut you think is most appropriate (including Maple):
6.  where  and C is the curve given by , 
7.  where  and C is the curve , 
8.  where C is some smooth curve from (0,0,0) to (1,4,3)
9.  where C is the path from (0,0) to (1,1) along the graph of  and from (1,1) back to (0,0) along the graph of .
10.  where C is the boundary of the square with vertices (0,0), (0,2), (2,0), and (2,2)