Gauss-Bonnet (Local) **John Waczak**
MTH 435 Date: May 8, 2018
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6A

b. Questions

1. I think I followed this section pretty well although the details of the proof of the theorem were a little hairy. I am curious how the jump from signed angle to interior angle was made.

2. To get rid of the $\int \kappa_g$, when using geodesics triangles is that because they have 0 geodesic curvature?

3. The Green's theorem that is used is just the one dimensional case of Stoke's theorem right? I was imagining $\oint \vec{F} \cdot d\vec{\ell} = \int (\nabla \times \vec{F}) dV$.

c. Reflections

I think this section was pretty straight forward and reasonable. I will need to go through the proof of the local theorem slowly to make sure I understand what's going on. I was a little confused by the X and Y functions he used.

d. Time

I took roughly 0.5 hour(s) to read this section.