

## Review 4 Math 261

Any term in **bold face** know the definition or statement of the Theorem well enough to state it on the test. The definition you give should be very similar to the one in the book or one with similar detail.

### Section 16.3 Fundamental Theorem of Line integrals

Sample problems: Example 4,5 Exercise 12,13,16, 29 [proof of Theorem 2 and Theorem 5](#)

### Section 16.4 Green's Theorem be able to use Green's thm in either direction

Sample problems: Example 1,3 Exercise 7

### Section 16.5 curl $\mathbf{F}$ , $\text{div}(\mathbf{F})$ , Theorem 4 vector form of Green's Theorem

Sample problems: Example 3 Exercise 2,15

### Section 16.6 parametric surface, surface Area, equation of tangent plane

Sample problems: Example 11, [proof of equation 9](#) Exercise 33,39

### Section 16.7 Be able to apply equations 2,4,9,10 [proof of equation 10](#)

Sample problems: Example 2,5 Exercise 7,23

### Section 16.8 Stokes Theorem

Sample problems: Example 1,2, Exercise 3,7

### Section 16.9 Divergence Theorem

Sample problems: Example 1,2 Exercise 2,12