

## MA 242 Section 1 – Final – Review

This review sheet contains questions that are similar to what I will ask on the test. The actual test will have fewer questions.

- (1) All questions on the review sheets for tests 1,2,3, and 4
- (2) 7.2.4: 11,13,15
- (3) 7.3.3: 13, 15 (here, “positively oriented” just means that the curve is oriented the right way for Green’s theorem)
- (4) 7.4.1: 1,7,9,13(tricky). Note that the book’s notation for surface integrals over vector fields is a tiny bit different than ours (they write  $\iint_S \vec{F} \cdot \hat{n} \, dS$  whereas we write  $\iint_S \vec{F} \cdot d\mathbf{S}$ ).
- (5) 7.5.1: 7,9,11 (all surfaces oriented outward)
- (6) 7.5.1: 21
- (7) You may find pages 85 and 86 in chapter 7 helpful
- (8) 7.6.1: 1,3,5 (note their notation for  $\text{curl}(F)$  is  $\nabla \times F$ )
- (9) 7.6.1: 7