

STAT 611

FALL 2011

HW3

DUE TUESDAY, SEPTEMBER 20

1. PROVE FACT V.7 ON PAGE 34 OF NOTES ON TRACE, DETERMINANTS, AND MATRIX FACTORIZATION. DO THIS WITHOUT USING GRAM-SCHMIDT ORTHONORMALIZATION.
2. PROVE RESULT A.19
3. COMPLETE PROBLEMS A.42 AND A.43
4. TAKE RESULT A.18 (b) AS GIVEN. PROVE RESULTS A.18 (c), (d), AND "OTHER FACTS ABOUT DETERMINANTS" (b) AND (c) FROM SLIDE 12 OF NOTES ON TRACE, DETERMINANTS,

AND MATRIX FACTORIZATION. YOU MAY  
USE ONE PART TO PROVE ANOTHER, BUT  
MAKE SURE TO AVOID A CIRCULAR  
ARGUMENT.

5. COMPLETE PROBLEMS A. 49, 50, 53,  
AND 54.

6. COMPLETE PROBLEMS 2.6 AND 2.10.