

**Third Homework: MATH 410**  
**Due Tuesday, 22 September 2009**

1. Exercise 2 of Section 2.2 in the text.
2. Exercise 4 of Section 2.2 in the text.
3. Exercise 1 of Section 2.4 in the text.
4. Exercise 2 of Section 2.4 in the text.
5. Exercise 3 of Section 2.4 in the text.
6. Exercise 12 of Section 2.4 in the text.
7. Prove Proposition 2.13 in the September 14 version of the class notes.
8. Prove Proposition 2.15 in the September 14 version of the class notes.
9. Prove Proposition 2.18 in the September 14 version of the class notes.
10. Prove Proposition 2.21 in the September 14 version of the class notes.
11. Prove Proposition 2.26 in the September 14 version of the class notes.
12. Prove Proposition 2.29 in the September 14 version of the class notes.