

# Math 430 – Problem Set 2

Due February 5, 2016

The following problems are from Section 3.4 of the textbook. Make sure you have the 2015 version (downloadable at <http://abstract.ups.edu/download/aata-20150812.pdf>).

1. 4.14
2. 4.15(c) and (f)
3. 4.16(c)
4. 4.17(c)
5. 4.27
6. 5.2(c), (i) and (n)
7. 5.7
8. 5.16
9. 5.26 (note: each part gives a different set of generators)
10. 5.30
11. 6.5(f)
12. 6.8
13. 6.11 (hint: the best way to prove that five statements are equivalent is to order them and show  $1 \Rightarrow 2 \Rightarrow 3 \Rightarrow 4 \Rightarrow 5 \Rightarrow 1$ )
14. 6.15
15. 6.18