

Mathematics/Computer Science 415H – Mathematical logic
TRENT UNIVERSITY, Fall 2006

Problem Sets

All references are to *A Problem Course in Mathematical Logic*, Version 1.6. Do the following problems and prove the following lemmas, propositions, theorems, and corollaries.

1. *Due in the week of 18 September, 2006.*
1.1 (parts 1, 3, 5), 1.2, 1.4, 1.5, 1.9 – 1.11
2. *Due in the week of 25 September, 2006.*
2.1 (parts 1, 3, 5), 2.2, 2.3, 2.4 (parts 1, 2), 2.6 – 2.8
3. *Due in the week of 2 October, 2006.*
2.9, 2.10, 3.1 – 3.4
4. *Due in the week of 9 October, 2006.*
3.5 – 3.8, 3.9 (parts 1, 3), 4.1, 4.2 *Bonus: 3.9 part 2*
5. *Due in the week of 16 October, 2006.*
4.3 – 4.9
6. *Due in the week of 30 October, 2006.*
4.10 – 4.13, 5.1 (parts 2, 4, 6, 8), 5.4 (parts 2, 4, 6, 8), 5.5 *Bonus: 5.7*
7. *Due in the week of 6 November, 2006.*
5.8 (parts 2, 4), 5.9 (parts 1, 2), 5.10 – 5.12, 5.14
8. *Due in the week of 13 November, 2006.*
6.1 (parts 1, 2), 6.2, 6.4 – 6.9
9. *Due in the week of 20 November, 2006.*
6.10 – 6.12, 6.14, 6.15 (parts 1, 2, 6), 6.17, 6.18 (parts 1, 2)
10. *Due in the week of 27 November, 2006.*
7.1 (parts 1, 2), 7.2, 7.3 (parts 2, 4, 6), 7.5 (parts 4, 5), 7.11, 7.13 (parts 2, 3), 8.1
11. *Due in the week of 4 December, 2006.*
8.2, 8.6, 8.11 – 8.13
12. *Due in the week of 11 December, 2006.*
8.14, 8.15, 9.2 (assuming 9.3) *Bonus: 9.3*