

MATH 285: Methods of Applied Math
Department of Mathematics, U of R
Homework 1

Spring 2024

Handed out: Wednesday, 01/31/24

Due: Wednesday, 02/14/24

Do ALL Problems for full credit. Each main problem is worth the same number of points; almost likewise for each subproblem. Carefully explain your steps. If you invoke a “well known” theorem, make clear precisely which theorem you are using and justify its use.

1. Do Prob. 3, p10 from Strauss but no need to sketch the characteristic curves
2. Do Prob. 11, p10 from Strauss
3. Do Prob. 8, p19 from Strauss
4. Do Prob. 10, p20 from Strauss
5. Do Prob. 3, p25 from Strauss
6. Do Prob. 1 and 5, p27 from Strauss
7. Do Prob. 2 p31 from Strauss
8. Do Prob. 4 p31 from Strauss
9. Do Prob. 8 p38 from Strauss
10. Do Prob. 1 p41 from Strauss