

Math 340 (Numerical Analysis) Homework

Note: Check assignments online for last minute revisions. I will announce revisions in class and/or by e-mail.

From Burden and Faires, 8th Edition: **Whenever needed, use a computer program, unless stated otherwise.**

Section	Exercise Numbers	Due Date	
1.1 1.2	1b, 2b, 3c, 9, 10, 11, 19 7e, 17	Wed 2/4	
1.3 2.1	1, 6ad, 7cd, 13a 2b (use calculator), 6bd (Use the convergence criterion $\frac{ x_n - x_{n-1} }{\max(1, x_n)} < \epsilon$), 8, 12, 14, click here for an additional problem	Wed 2/11	
2.2 2.3	5, 8, 10, 12c, 14, 19, 24 1 (use Calculator), 3 (use calculator), 12b, 16, 18, 33	Fri 2/20	
2.4 2.5	6, 7, 8, 10 (do it for m=2), 11 1b, 4, 13a, 14	Wed 3/4	
3.1	2ad, 4ad, 6a, 8a, 10a, 18, 20, 21, 29	Wed 3/11	
3.2	8, 10, 11, 17, 19, 21,	Wed 3/18	
3.3	1, 2, 12, 13, 16,	Wed 3/18	
8.3	1ab, 3ab, 5d, 8	Wed 3/25	
4.1	2 (only forward difference), 4(only forward difference), 6a, 8a, 22 (you may ignore the hint given and follow the method that I used in class), 27	Wed 4/8	
4.1	20, 28	Wed 4/15	
4.2	1a, 6, 9, 12 Hint: $\left(\frac{2+h}{2-h}\right)^{1/h} = \exp\left\{\frac{1}{h} [\ln(2+h) - \ln(2-h)]\right\}$	Wed 4/15	
4.3	2b, 4b, 6b, 8b, 14, 15, 16, 18, 20	Mon. 4/20	
4.4	8, 12, 20	Mon. 4/20	

4.7	1(ag), 3(ag), 6, 8	Wed. 4/29	
6.2	2a, 4a, 6a	Wed. 5/5	
6.5	2a, 4a	Wed. 5/5	
8.1	4, 5d, 9, 13 Use Matlab for computations.	Wed, 5/12	