

## Math 2A Tentative Homework

At this level of math, you should consider it your responsibility to do as many of the textbook problems as possible. The problems listed below are the minimum you should do to develop the necessary understanding to grasp future material.

- LEARN** : You should consult your notes, your textbook, the solution manual, a tutor or study partner as needed when doing these exercises, to make sure you understand the logic of the problem solving process. Check your answers against the solutions, figure out what you did incorrectly, and redo the problem, writing the solution logically, clearly and succinctly. Then do another (possibly unassigned) problem of the same type to make sure you understand.
- TEST** : Do these without any help. Make sure you can complete these all the way through without stopping for extended periods of time to think about the next step. Think how to check your answer without using the solutions. Do more problems if needed.

Remember: If you hope to pass this class, you should do **more** than the homework assigned below.

**NOTE:** Many of the **TEST** questions do not have answers in the textbook.  
**DO NOT SKIP THOSE QUESTIONS.**  
Instead, after you think you have a solution, compare it to several other students' solutions.  
Decide whose solution is properly justified and most efficient.

### MIDTERM 1 SECTIONS

- 1.1 **LEARN** : 1, 5, 9, 13, 17, 19, 21, 25, 29, 31, 33, 37, 39, 41, 43, 45, 47, 49, 55  
**TEST** : 2, 3, 10, 14, 15, 20, 23, 30, 32, 34, 38, 42, 46, 51, 57
- 1.2 **LEARN** : 1, 9, 21, 25, 31, 35, 39, 47  
**TEST** : 3, 13, 23, 27, 33, 37, 43
- 1.3 **LEARN** : 1, 3, 7, 9, 12, 17, 25, 31  
**TEST** : 2, 4, 8, 10, 26, 27
- 2.1 **LEARN** : 1, 7, 13, 15b, 19, 25, 29, 39, 41  
**TEST** : 3, 9, 20, 22, 30, 40
- 2.6 **LEARN** : 1, 7 (use Euler's method only)  
**TEST** : 2, 9 (use Euler's method only)
- 2.2 **LEARN** : 5, 7, 9, 13, 19, 25, 29, 39  
**TEST** : 8, 10, 12, 14, 18, 28, 30, 40
- 2.3 **LEARN** : 7, 13, 15, 17, 19, 20, 23-25, 37, 39  
**TEST** : 11, 14, 16, 21, 28, 38, 40
- 2.4 **LEARN** : 3, 7, 13, 18, 21, 27, 29, 31, 33, 44  
**TEST** : 5, 9, 11, 14, 15, 17, 26, 28, 30, 34, 35
- 2.5 **LEARN** : 3, 5, 9, 11, 17, 21, 23, 30, 35  
**TEST** : 7, 10, 13, 19, 22, 27
- 3.1 **LEARN** : 9, 19, 23, 25, 35, 36, 37  
**TEST** : 17, 27, 42, 44, 48
- 3.2 **LEARN** : 1, 5, 15, 21  
**TEST** : 2, 8, 16, 18
- 3.3 **LEARN** : 1, 5  
**TEST** : 4, 6

### MIDTERM 2 SECTIONS

- 4.1 **LEARN** : 3, 5, 9, 19, 25, 33, 35  
**TEST** : 2, 10, 21, 26, 34, 36, 40
- 4.2 **LEARN** : 7, 9, 13, 15, 19  
**TEST** : 2, 12, 20
- 4.3 **LEARN** : 5, 7, 13, 17, 21, 23, 35, 49, 52, 55, 61  
**TEST** : 6, 8, 14, 19, 22, 26, 33, 56, 58
- 4.7 **LEARN** : 7\*, 11\*, 13\*, 15★  
**TEST** : 8\*, 14\*, 28\*

\* Solve using both methods (guessing  $y = x^r$ , and substituting  $x = e^t$ )

★ Solve by guessing  $y = x^r$ ; for extra challenge, solve by substituting  $x = e^t$

- 4.4 **LEARN** : 1, 3, 7, 11, 15, 17, 19, 21, 23, 35, 41  
**TEST** : 6, 8, 10, 28, 30, 31, 43
- 4.6 **LEARN** : 3, 5, 9, 11, 13, 15, 17, 21, 23  
**TEST** : 4, 6, 10, 12, 14, 18, 22, 24

4.9 LEARN : 9, 11, 13, 21, 23  
TEST : 2, 6, 15, 16, 24  
4.10 LEARN : 1, 5, 7, 13  
TEST : 6, 10, 14

### **MIDTERM 3 SECTIONS**

6.1 LEARN : 7 (radius only), 23, 27, 33  
TEST : 4 (radius only), 24, 26, 34  
6.2 LEARN : 1, 11, 17, 19  
TEST : 2, 9, 18, 20  
6.3 LEARN : 9, 11, 19, 23  
TEST : 7, 12, 18, 20  
7.1 LEARN : 3, 5, 7, 13, 15, 17, 25, 29, 31, 39, 55, 56abc  
TEST : 4, 6, 8, 14, 16, 18, 28, 32  
7.2 LEARN : 5, 7, 9, 11, 13, 15, 19, 23, 27, 31, 33, 36, 37, 39  
7.3 LEARN : 5, 9, 15, 17, 19, 25, 29, 39, 41, 43, 47, 55, 59, 61, 65, 67, 69  
7.4 LEARN : 1, 3, 7, 9, 11, 13, 49, 51, 57, 59

### **POST-MIDTERM 3 SECTIONS**

5.\* TBA