

- **Suggested Problems #1**

- Math 1B03 Term 2/1ZC3 Test #1 will be based on the sections from the following problems plus Matlab plus proper computer card filling (see last year's test and the scantron instructions below)

Chapter 1:

- 1.1 #5,7,9,13,21, T/F (a),(c),(e),(h)
- 1.2 #1,3,5,7,25, T/F (f),(h),(i)
- 1.3 #1,5,11,15,29,35, T/F (h),(i),(j)
- 1.4 #3,11,17,33,46, T/F (b),(c),(d),(e)
- 1.5 #1,3,5,7,11,29
- 1.6 #1,3,15,17, T/F (b),(c),(e),(f)
- 1.7 #19,21,26,34,35,41,43,44,45 T/F (b),(c),(f),(i)

Chapter 2:

- 2.1 #3,17,21,25,31,36
- 2.2 #9,13,17,21,26, T/F (a),(b),(c),(e)
- 2.3 #17,19,33,35, T/F (a),(b),(c),(f),(g)

Chapter 5:

- 5.1 #7,9,11,28,33,34,35, T/F (a),(b),(c)
- 5.2 #5,7,14(ans: 1,3,not diagonalizable),19,36, T/F (c),(d),(e),(f)

- Here are two [sample tests](#) (with answers)
- Read important [instructions](#) on how to fill out the computer card

- **Suggested Problems #2**

- Math 1B03 Term 2/1ZC3 will be based on the sections from the following suggested problems plus Matlab plus proper computer card filling (see last year's test and the scantron instructions below).

Chapter 5:

- 5.4 #1,2,7,9,12, T/F (a),(b),(c),(d)

Chapter 10 (from the 9th Edition, answers given below):

- [10.1](#) #5,11,17,19,21,22
- [10.2](#) #9,11,15,16,19,21,33,35
- [10.3](#) #3,5,7(b),(c),11,14,15

Chapter 3:

- 3.1 #7,13,17,19,21,23,27
- 3.2 #7,13,15,17,27, T/F (d),(e),(g),(h)
- 3.3 #15,21,27,31,33,38, T/F (b),(c),(d),(f)
- 3.4 #1,9,13,15,23, T/F (d),(f)
- 3.5 #15,17,25,29,34,36

Chapter 4:

4.1 #1,2,5,7,11

4.2 #1,2,3,7,10,11,13 T/F (e),(g),(h),(j)

- Chapter 10 Answers:**

10.1 #5. $2+3i, -1-2i, -2+9i$, **11.** $76-88i$, **17.** 0, **19.** $[1+6i-3+7i; 3+8i-3+12i], [3-2i-6+5i; 3-5i-13+3i], [3+3i-2+5i; 9-5i-13-2i], [9+i-12+2i; 18-2i-13+i]$, **22.** $-1\pm i, 1/2\pm\sqrt{3}i/2$

10.2 #9. $-7/625-24i/625$, **11.** $(1-\sqrt{3})/4+(1+\sqrt{3})i/4$, **15.** $-1-2i, -3/25-4i/25$, **19.** $-y, -x, y, x$, **33.** $(1+i)t, 2t$, **35.** $[i^2; -1-i], [0-1; -i-2i]$

10.3 #3. $2[\cos(\pi/2)+i\sin(\pi/2)], 4[\cos(\pi)+i\sin(\pi)], 5\sqrt{2}[\cos(\pi/4)+i\sin(\pi/4)], 12[\cos(2\pi/3)+i\sin(2\pi/3)], 3\sqrt{2}[\cos(-3\pi/4)+i\sin(-3\pi/4)], 4[\cos(-\pi/6)+i\sin(-\pi/6)]$, **5.** 1,

7. $\sqrt{6}/2+\sqrt{2}i/2, -\sqrt{6}/2-\sqrt{2}i/2, 3/2+3\sqrt{3}i/2, 3/2-3\sqrt{3}i/2$, **11.** $\pm 2, \pm 2i$, **14** 16, $i/2^{18}$ **15.** $-3, 0; -3, 0; 0, -\sqrt{2}; -3, 0$

- Here are two [sample tests](#) (with answers)
- Read important [instructions](#) on how to fill out the computer card

- Suggested Problems #3**

- These suggested problems cover the material after Test #2.

Chapter 4:

4.3 #1,3,9,22,23(b), T/F (b),(d),(f),(g)

4.4 #13,17,19,27, T/F (a)-(d)

4.5 #4[ans: $(4,1,0,0), (-3,0,1,0), (1,0,0,1)$], 7,8,9,11,15 T/F (b)-(e)

4.7 #3,9,15,17,19, T/F (a),(c),(d),(i)

Chapter 6:

6.3 #7,9,23,29,31,35 T/F (a),(b),(e)

Chapter 10:

10.14 #1,2,3,7,8

- Here is a [sample exam](#) (with answers)