

Diff Eqns: Homework Page 3 (7th edition/blue book)

| After Class on: | Section: | Problems | Due Date |
|-----------------|----------|--|---------------------|
| 3/10/2020 | 6.1 | Set A: #1,3,9,11,13,15,23,25,27 Set B: #14,16 | Thursday, 3/19/2020 |

Hints & Notes: 6.1 #14 & 16: On both problems, use the initial conditions $y(0)=1$ and $y'(0)=0$. That should simplify your work.

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| 3/12/2020 | 8.1 | Set A: #1-23 odd Set B: #2,14,18,22 | Thursday, 3/19/2020 |
| | Plus | ALSO , use the Phase Portrait applet linked from the class website to plot the direction field for 8.1 #1. Click on the plot to get some typical solution curves, then print out the graph. | |

Hints & Notes: #14: Don't solve the system. Just show that that suggested solution actually plugs in and works in the system.
#18: For the two vectors to form a fundamental set of solutions, there are two characteristics to be satisfied. One of those is that the individual vectors must solve the system, and we already know that to be true. So there is only one other thing to show.

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| 3/17/2020 | 8.2 A | Set A: #1,3,5,9,13 Set B: #2,4,6 | Thursday, 3/26/2020 |
| | Also | For #2,4 & 6, draw (by hand) the phase plane, including the straight line solutions, as well as some solution curves. | |

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| 3/19/2020 | 8.2 B | Set A: #19,23,29,33,39,45 Set B: #20,22,34 | Thursday, 3/26/2020 |
| | 8.3 | Start on Set A: #1-21 odd Start on Set B: #2,8,16 | Thursday, 4/2/2020 |

Hints & Notes: Some of the above problems are rather messy. To save you time, I have assigned very few of them. Show me your very best work.

| After Class on: | Section: | Problems | Due Date |
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| 3/24/2020 | 8.3 | Finish the above problems | |
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| 3/26/2020 | 5.2 | Problems will be assigned in class This topic will not be on Exam 3 | Thursday, 4/9/2020 |
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| 3/31/2020 | Review for Exam 3 | | |
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| Thursday, 4/2/2020: | Exam 3: Sections 2.6, 8.1-3, 5.2, & 6.1 | | |
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