- tutorial, check one: \bigcirc T9:30; \bigcirc T10:30; \bigcirc T11:30; \bigcirc R10:30; \bigcirc R11:30; \bigcirc R12:30.
- $\bullet\,$ begin each problem on a new page & clearly identify each question.
- $\bullet\,$ use words to describe your procedures & to interpret your results.
- put boxes around your final results.
- due on friday 11 september at start of lecture.

question $\#$	CONCEPT keywords & MAIN formula/result
# 3.4.41	concept
	result
# 3.5.18	
# 3.6.15	
# 3.7.16	
# 3.7.17	

- problems for submission are indicated in **bold**.
- homework portfolios will also be graded on completeness & presentation.
- certain problems will be designated as practice problems; and although not subject to submission, will be assumed to have been covered for purposes of examinations.
- note: ranges of problems are generally of the same type. You needn't consider all of them once you understand how they work.

Section 3.4

- practice: # 27 (what is the wronskian of the corresponding complex exponential solutions?), 28, 39-42
- #41 to solve this problem, you need to change the independent variable from t to $x = \ln t$. The first step is to rewrite the ODE for y(t) into the ODE for y(x) – this involves use of the chain & product rules. If you need a hint, see problem #34a. (Understanding how to change variables is *very important*.)

Section 3.5

• practice: # 8-10, 12-14, 25-28

#18

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Section 3.6
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• practice: # 5-8, 12-14

#15 read example #5 of the section carefully.

Section 3.7

• practice: # 7, 8, 13-15

#16 follow the approach of example #1 for your presentation.

#17 just use the formulas of theorem 3.7.1.

Maple Exercise

• use a modification of one of the Maple sheets to address the question posed in problem 3.5.31. Write two sentences summarizing how successful you were making Maple illustrate the result.