```
HW 1, Due Week 2
```
1.1: 1, 4, 5, 6, 9, 15, 19, 27, 29, 30, 32, 33, 34
    `Reading. Required background. Nothing graded from 1.1.`
1.2: 1, $\boxed{2}$, $\boxed{4}$, 5, $\boxed{6}$, 7, 9, $\boxed{10}$, 13, 15, 16, 18,
    21, 22, 24, 26, 29, 31, 32, 33, 35, 40, 41
1.3: 2, 3, 5, 6, $\boxed{8}$, 10, 11, 13, $\boxed{14}$, 23, 25, 26, 33
    `Print: Exercise 1.3-8 image at 200%`
1.4: 2, 3, 4, $\boxed{6}$, 9, $\boxed{12}$, 13, $\boxed{18}$, 19, 20, 21, $\boxed{22}$, $\boxed{26}$, 36,
    41, 42, 45, 46, 49, 51, 56, 59

All homework listed in one file Here.

Computer Lab 1, Due Week 3:
http://www.math.utah.edu/~gustafso/s2015/2280/2280mapleL1-intro-S2015.pdf
HW 2, Due Week 3
1.5: 1, 7, $\boxed{8}$, $\boxed{10}$, 13, $\boxed{18}$, $\boxed{20}$, 21, 23, 24, 33,
$\boxed{34}$, 36, 39
3.7: 1, 2, $\boxed{4}$, 7 [LC and RC circuits, LRC after 3.6]
2.1: 1, 3, 4, 6, $\boxed{8}$, 10, 12, $\boxed{16}$, 22, 23, 33, 37
2.2: 5, 7, 8, 9, $\boxed{10}$, 11, 15, 17, $\boxed{18}$
2.3: 2, 3, 9, $\boxed{10}$, 13, 14, 17, 18, 19, $\boxed{20}$, $\boxed{22}$, 24, 25

All homework listed in one file Here.

```
HW 3, Due Week 4, as a maple/matlab/mathematica computer project:
http://www.math.utah.edu/~gustafso/s2015/2280/numericalDEproject-S2015.pdf
```
2.4: 2, 3, 4, $\boxed{6}$, 10, 12, 17 Euler's method

2.5: 3, 4, 5, $\boxed{6}$, 10, 12 Improved Euler or Heun

2.6: 3, 4, 5, $\boxed{6}$, 10, 12 Runge-Kutta, RK4

All homework listed in one file Here.

```
HW 4, Due Week 5
```
3.1: 1, 6, 10, 27, 33, $\boxed{34}$, $\boxed{36}$, 37, $\boxed{38}$, 39, $\boxed{40}$, 41, $\boxed{42}$, 43, $\boxed{46}$, $\boxed{48}$, 53
3.2: 1, 2, 5, 8, 11,13, 16, $\boxed{18}$, 19, 20, 21, $\boxed{22}$, 23, 25, 26
3.3: 3, 7, $\boxed{8}$, 9, $\boxed{10}$, 11, $\boxed{16}$, 17, 23, 27, 31, $\boxed{32}$, 37, 40
3.4: 3, 4, 5, 6, 10, 11, 15, 17, 19, $\boxed{20}$, 21, 33, $\boxed{34}$

All homework listed in one file Here.

HW 5, Due Week 6

3.5: 2, 3, 5, $\boxed{6}$, 10, 11, $\boxed{12}$, 19, 21, $\boxed{22}$, 25, 27, 29, 31, 34, 39,
    43, 45, 47, 51, 52, $\boxed{54}$, 57, $\boxed{58}$, 59

3.6: 3, $\boxed{4}$, 5, 7, $\boxed{8}$, 9, $\boxed{11}$, 13, 15, 17, $\boxed{18}$, 20, 21, 22

3.7: 1, 2, 4, 7, $\boxed{12}$, 15, $\boxed{18}$, 19 [LRC circuits]

Computer Lab 2, Newton Cooling, Due Week 6. Choose one project.

http://www.math.utah.edu/~gustafso/s2015/2280/2280mapleL2-freezing-pipes-S2015.pdf

http://www.math.utah.edu/~gustafso/s2015/2280/2280mapleL2-swamp-cooler-S2015.pdf

All homework listed in one file Here.

```
HW 6, Due Week 7
```
7.1: 1, 3, 7, 9, 11, 13, 17, $\boxed{18}$, 19, $\boxed{22}$, 23, 27, $\boxed{28}$, 29, 31, 40
7.2: 3, 7, 9, $\boxed{10}$, 15, $\boxed{16}$, 17, 19, $\boxed{20}$, 21, 23, $\boxed{24}$, 35, 37
7.3: 3, $\boxed{6}$, 7, 9, $\boxed{12}$, 13, 17, $\boxed{18}$, 20, 23, 27, 28, 29, 30, 32, 34, 37

All homework listed in one file Here.

```
 HW 7, Due Week 8
```
7.4: $\boxed{2}$, 3, 9, 13, 15, 17, $\boxed{22}$, 23, 26, 27, 29, 30, $\boxed{36}$, 37

7.5: 3, $\boxed{4}$, 7, 9, 11, 13, $\boxed{14}$, 21, $\boxed{22}$, 25, 27, $\boxed{28}$, 31, 33, 34, 37

All homework listed in one file Here.

```
HW 8, Due Week 9
```
7.6: 2, 5, 6, 7, 8, 11, 12, 18, 21, 22 [impulses and Laplace]
4.1: 1, 3, 2, 5, 7, 8, 11, 12, 15, 17, 20, 21, 24, 26
4.2: 7, 12, 27; A Laplace or Cayley-Hamilton-Ziebur solution is acceptable.
4.3: 7, 9, 21;
```
See RK4 for systems
http://www.math.utah.edu/~gustafso/s2015/2280/numericalVectorMethods.pdf
```

All homework listed in one file Here.

```
HW 9, Due Week 11 after Spring Break (Week 10, no classes)
```
5.1: $\boxed{16}$, 17, $\boxed{20}$, $\boxed{22}$, $\boxed{24}$, 25, $\boxed{28}$

Computer Lab 2, Newton Cooling

Computer Lab 3, Laplace

http://www.math.utah.edu/ gustafso/s2015/2280/2280mapleL2-freezing-pipes-S2015.pdf

http://www.math.utah.edu/ gustafso/s2015/2280/2280mapleL2-swamp-cooler-S2015.pdf

http://www.math.utah.edu/ gustafso/s2015/2280/2280mapleL3-laplace-S2015.pdf

All homework listed in one file Here.

```
HW 10 does not exist. Spring Break.
No Quiz 10. No Lab 10.
```

All homework listed in one file Here.

```
HW 11, due Week 12
```
5.2: $\boxed{8}$, 11, 13, $\boxed{20}$, 21, 27, 29, $\boxed{30}$, 31, 35, 39, 43, 45, 49

5.3: $\boxed{6}$, 9, 13, 19, $\boxed{24}$, 27

5.4: 1, 7, $\boxed{11}$, $\boxed{29}$

5.5: 1, 3, $\boxed{4}$, 11, $\boxed{12}$, 23, $\boxed{38}$

All homework listed in one file Here.

```
HW 12, due Week 13
```
5.6: 1, 13, $\boxed{15}$, 19, $\boxed{23}$

6.1: 3, $\boxed{4}$, 5, 7, $\boxed{8}$, 11, 15, 17, $\boxed{18}$

6.2: $\boxed{2}$, 5, 7, 9, $\boxed{12}$, 13, 17, 19, 21, $\boxed{22}$, 23, 29

6.3: 5, 7, $\boxed{8}$, $\boxed{9}$, $\boxed{10}$, 11, 18, 19

All homework listed in one file Here.

```
HW 13, due Week 14
```
6.4: 1, 3, $\boxed{4}$, $\boxed{8}$, 9, 10, 11, 13, 14
Computer Lab 4, Resonance
```
http://www.math.utah.edu/~gustafso/s2015/2280/2280mapleL4-resonance-S2015.pdf
```

All homework listed in one file Here.

```
HW 14, due Week 15
```
9.1: $\boxed{6}$, 7, $\boxed{10}$, $\boxed{13}$, 15, 17, 20, $\boxed{24}$, 30
9.2: 2, $\boxed{8}$, 9, $\boxed{20}$
9.3: 1, $\boxed{4}$, 9, $\boxed{17}$, $\boxed{20}$
9.4: $\boxed{1}$, 7, $\boxed{9}$, 13

All homework listed in one file Here.

```
HW 15, due by 6pm Tuesday May 5 under the door JWB 113
```
9.5: 1, 2, 3 , 7 , 9

9.6: 1, 5

All homework listed in one file Here.