

## HOMEWORK #3, MATH 441, FALL 2017

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Please note:

- (1) You may work together on homework, but you must write up your own solutions individually. In particular, you must write your own code, spreadsheets, etc.
- (2) You must acknowledge with whom you worked (specify their `gradescope.com` email addresses). You must also acknowledge any sources you have used beyond the textbook and class material.
- (3) When you submit your homework to `gradescope.com`, you need to put the solutions to different problems on different pages; `gradescope.com` will ask you to identify which pages correspond to which problems.

- (1) Use LP software to find the smallest possible time from Task 1 to Task 6, given the following wait times between tasks: here  $\text{Wait}(i, j)$  is the minimum amount of time after task  $i$  is scheduled that task  $j$  is allowed to be scheduled:

$i$	$j$	$\text{Wait}(i, j)$
1	2	4.1
1	3	3.7
2	4	2.9
2	5	5.1
3	4	3.7
3	5	5.6
4	6	2.4
5	6	2.2

- (2) Solve the dual LP, and explain how the solution corresponds to a maximum wait time path from Task 1 to Task 6.

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