



## Module 5: Linear Equations and Function M-Files

### M5 Exercise

#### Instructions

1. Do exercise 6.3 on page 160 of the textbook.
  - Submit an m-file named: `hw5_ex1_LastName.m`.
2. Modify your solution to last week's exercise (**`poly_curv_fit.m`**) by implementing left division rather than explicitly implementing the least-squares matrix solution.
  - Submit an m-file named: **`poly_curv_fit_2_LastName.m`**.
3. Do a variation on exercise 7.5 on page 177 of the textbook. Do not implement an indefinite-length series. Instead, implement a fixed-length series that terminates at the seventh-power term. Test it in the range of  $-3 < x < +3$ .
  - Submit an m-file named: **`myexp_LastName.m`**.
  - Please use the **Homework template (Word)** when submitting your work.

**For this exercise, you should submit the following files in the M5 Exercise submission area:**

1. `hw5_ex1_LastName.m`
2. `poly_curv_fit_2_LastName.m`
3. `myexp_LastName.m`

*Note: Substitute your last name for LastName in all submitted files.*

Please refer to the Course Schedule for due date.