Based on what we have done the last few days in class, I want you to do your own project on spherical mirrors and lenses. Similar to the presentation done in class, you will present the special cases for the mirrors/lenses. Each mirror/lens case will go on a separate page, following the appropriate rules given in class. The project will graded as follows:

- Section: Mirrors
  - 7 cases (7 pts each); for each case you should:
    - Identify the type of mirror used
    - Identify the case
    - List the image properties
  - For each mirror, a compass should be used to draw it. Also, a ruler is helpful to correctly identify C, F, and V. These should be labelled appropriately.
- Section: Lenses
  - 6 cases (6 pts each); for each case you should:
    - Identify the type of lens used
    - Identify the case
    - List the image properties
  - For each lens, great care should be used to draw it. Also, a ruler is helpful to correctly identify 2F, F, and O. Also, you should locate the secondary focal point, F‘, and 2F‘. These should be labelled appropriately.

Included in your report should be a title page and two section pages (5 pts). The title of your project should include the words Spherical Mirrors and Lenses; also include your name on the title page. Some careful math analysis will tell you that this only adds up to 90 points. Again, the remaining ten points can be earned by doing something creative, something original. There is no criteria for this; asking any question that can be answered in this sheet of paper will cause a deduction in your creative points. There should be a total of 16 pages in your report. Please bundle everything together, but do not use a stapler. A sample page may look similar to a single slide from the class presentation.