

St John Baptist De La Salle Catholic School, Addis Ababa

Homework 4

4th Quarter

Aaron GK

June 12, 2023

Notes, and use of other aids is allowed. Read all directions carefully and write your answers in the space provided. To receive full credit, you must show all of your work.

Cheating or indications of cheating and similar answers will be punished accordingly.

Information

- The homework is due on **Tuesday, June 13th**.
- You should Work on it **in groups** and consult me if you have any questions. As I have reiterated multiple times, cheating between groups will have a serious consequence.
- For purposes of neatness and simplicity of grading, you should do the homework on an **A-4 paper**.

Questions on Image formation by Mirrors & Optical Instruments

1. Using ray tracing, show the image created when an object is placed at the following places on a converging mirror:
 - beyond $2F$
 - at $2F$
 - between $2F$ & F
 - at F
 - between the mirror & F
2. Go to the Chapter 25 Problems & Exercises Section(<https://openstax.org/books/college-physics-ap-courses/pages/25-problems-exercises>), and do problems 54, 55, and 59.
3. Go to the Chapter 26 Problems & Exercises Section(<https://openstax.org/books/college-physics-ap-courses/pages/26-problems-exercises>), and do problems 20, 21, and 24.

Advanced Problems

4. Do question 62 from Chapter 25.
5. Do question 38 from Chapter 26.