PHYS 212, Honors Section - Review Material

Chapter 36: Image Formation

- General concepts: Object distance, image distance, real vs virtual image, lateral magnification.
- <u>Plane mirrors</u>: Location of the image, virtual image, magnification M = 1.
- <u>Curved mirrors</u>: Convex (diverging) and concave (converging) mirrors; Center of curvature and center of the mirror; Principal axis; Radius of curvature R; Focus and focal length f = R/2; Mirror equation and lateral magnification,

$$1/p + 1/q = 1/f$$
, and $M = h'/h = -q/p$.

Pay attention to the signs of the quantities in the mirror equation. Be able to find the image location and magnification using equations or graphically using ray diagrams (accurately drawn).

• Lenses: Will not be on the test.

The rest of the chaper was not covered.

Note: You are not required to know the topics and equations inside square brackets.

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