

*typical class lecture notes will not be posted.. onenote completely stopped working for me. I don't think I will be able to fix it in time. Below are the questions we covered in class on Wednesday covering optical elements. Basically, Snell's law + geometry leads to some basic rules for tracing light rays as they interact with thin lenses and concave/convex mirrors. The optics equations sheet outlines all the new definitions and rules.

Carefully construct a scaled ray diagram for an object that is 10 cm tall and 50cm in front of a converging lens of focal length 30 cm. From this ray diagram, determine the height of the image and the magnification. Then use the thin lens equation to calculate both.

Carefully construct a scaled ray diagram for an object at the focal point of a diverging lens. From this ray diagram, determine the height of the image and the magnification. Then use the thin lens equation to calculate both.

A fun house mirror has a radius of curvature of 20 ft. You stand 6 ft in front of it. Determine the location of the image produced, and the magnification.