8. Laser (12 pts)

Apparatus: Laser (wavelength $\lambda = 650\,\text{nm}$), ruler, stand, a strip of reflecting material, a sheet of paper with a circular hole (in your pack of paper sheets), pencil. Note that the reflecting material provided to you is coated with a layer of densely packed tiny glass spheres of equal diameter.

1) Describe the position and geometry of the diffraction pattern, which can be observed, when the laser beam falls onto the strip; use different incidence angles.

2) Provide a qualitative (approximate) explanation for the observed phenomenon.

3) Estimate the diameter of these glass spheres.