1. An interference pattern results when a laser beam shines on two slits spaced 10^{-5} m apart. If the inner fringes are spaced 2.75° apart, what is the wavelength of the laser?

   A) 0 nm
   B) 320 nm
   C) 480 nm
   D) 960 nm

2. A camera is set to an f-stop of f/2. If the lens has a focal length of 50 mm, what is the effective diameter of the lens?

   A) 2 mm
   B) 25 mm
   C) 50 mm
   D) 100 mm

Equations:

$$\text{f-stop} = f/D$$
$$d \sin \theta = m \lambda \qquad \sin \theta_c = n_2/n_1$$
$$D \sin \theta = m \lambda \qquad \tan \theta_p = n_2/n_1$$