0:28:30
1. Two slits are separated by 2 cm. The barrier is 2m from the screen. Find the angular location of the second bright fringe above the central axis for 500 nm light.

0:38:30
2. The first dark fringe is 2 mm above the central axis. The slits are separated by ½ mm. The screen is 1.5 m from the barrier. Find the wavelength of the light.

1:02:50
3. Light hits a diffraction grating that has 2×10^4 lines per cm. The second bright fringe away from the center is at an angle of 40° from the axis. What is the frequency of this light?

1:27:30
4. Light with wavelength 500 nm hits a film of thickness 300 nm. The index of refraction is 1.5 for the film. What is the smallest thickness of the film that would result in constructive interference for this wavelength?