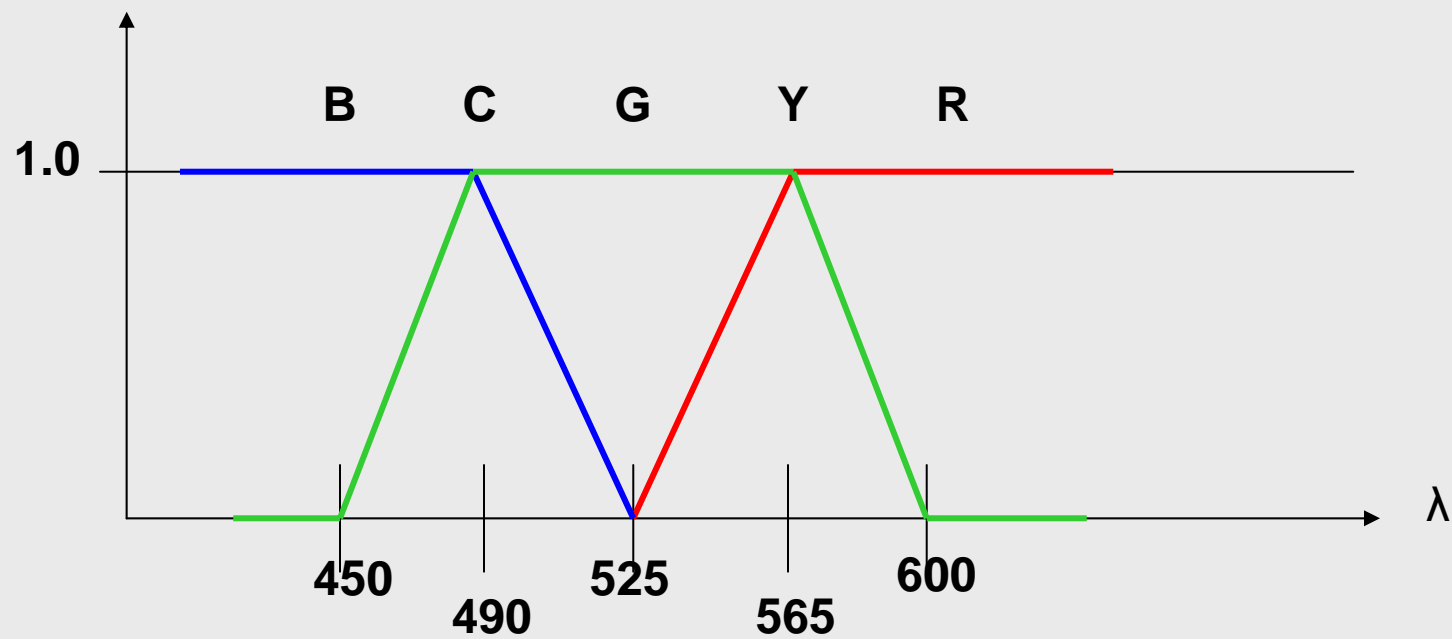
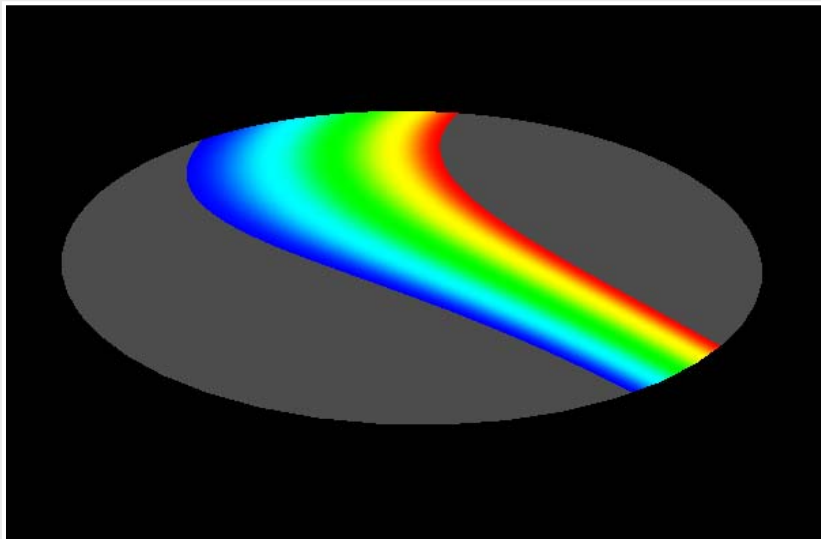
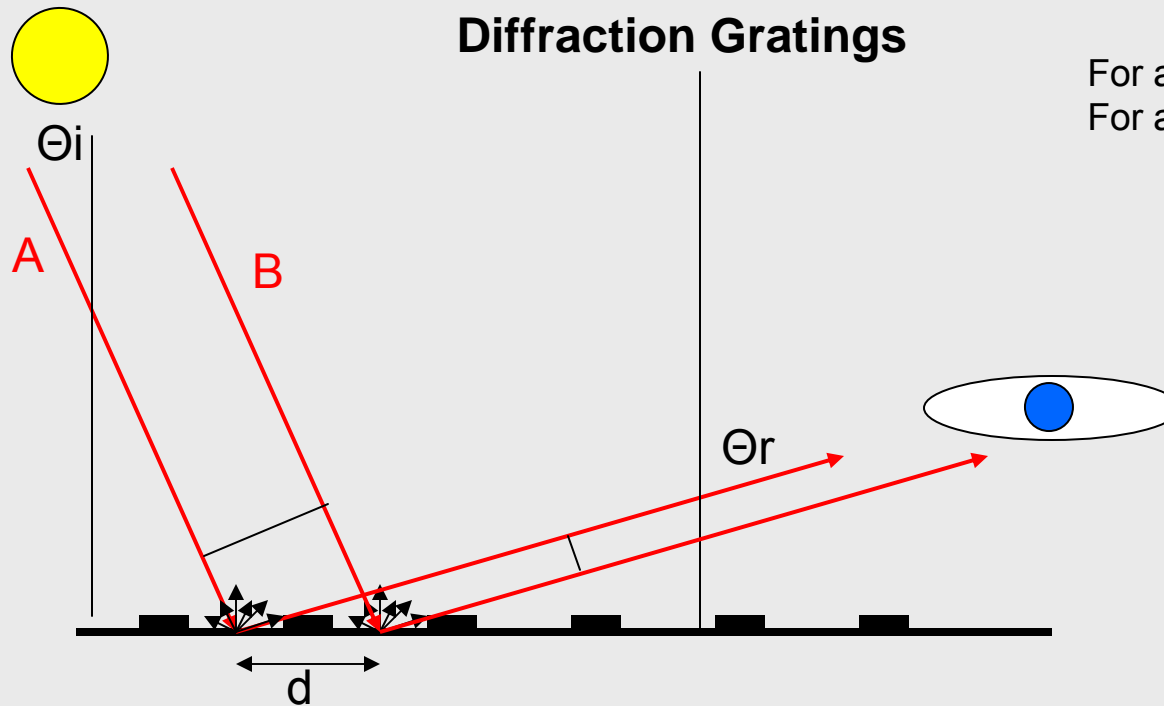


Subtractive Colors



Diffraction Gratings

For a CD, $d = 1600 \text{ nm}$
For a DVD, $d = 740 \text{ nm}$



On the way in, A travels $d \sin(\Theta_i)$ less than B. On the way out, A travels $d \sin(\Theta_r)$ more than B.

So, wavelengths reinforce when $\text{abs}[d \sin(\Theta_i) - d \sin(\Theta_r)]$ is a multiple of the wavelength $= m\lambda$

$$\lambda^* = \text{abs}[d \sin(\Theta_i) - d \sin(\Theta_r)] / m$$