

How can we get the distance b/w two rings(colours) in Newton's rings?

The distance between two rings is the difference between radiiuses of Newton's rings:

$$\Delta r = r_N - r_{N-1}$$

The radius of  $N^{\text{th}}$  Newton's bright ring is given by

$$r_N = \sqrt{\left(N - \frac{1}{2}\right) \lambda R}$$

$N$  is the bright-ring number,

$R$  is the radius of curvature of the lens the light is passing through,

$\lambda$  is the wavelength of the light passing through the glass.

The radius of  $N^{\text{th}}$  Newton's dark ring is given by

$$r_N = \sqrt{N \lambda R}$$

$N$  is the dark-ring number,

$R$  is the radius of curvature of the lens the light is passing through,

$\lambda$  is the wavelength of the light passing through the glass.