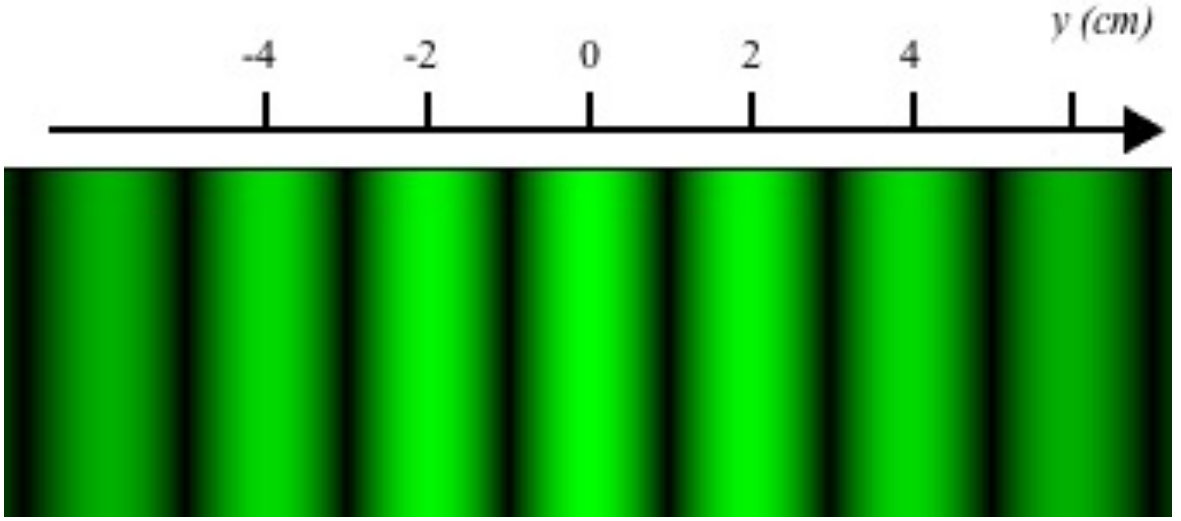
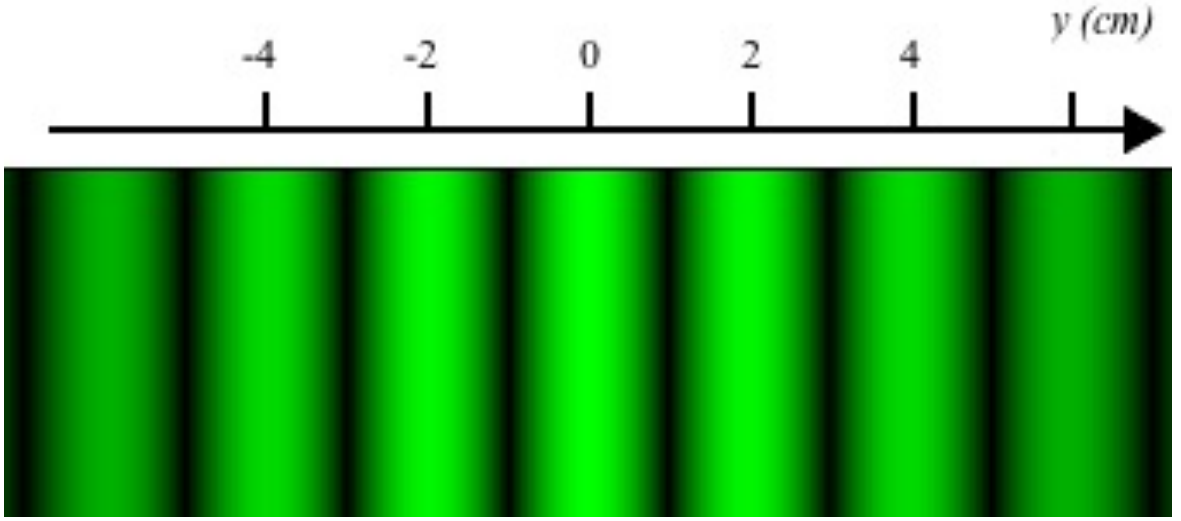
The green interference fringes shown in the picture on the right are produced on a screen by putting a green laser beam with a wavelength of 550 nm through two identical slits. If the screen is 4 m from the slits, can the spacing between the slits be calculated?

1. Yes
2. No



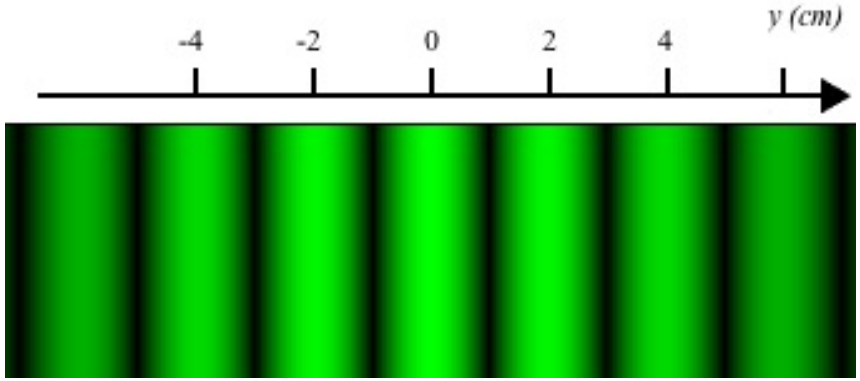
The green interference fringes shown in the picture on the right are produced on a screen by putting a green laser beam with a wavelength of 550 nm through two identical slits. If the screen is 4 m from the slits, can **you** find the spacing between the slits?

1. Yes
2. No



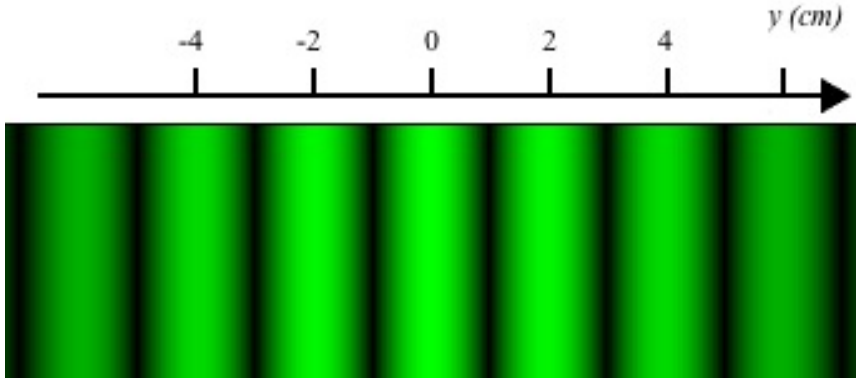
If the wavelength were reduced, what would happen to pattern on the screen?

1. It would not change.
2. It would squeeze closer together.
3. It would spread further apart.
4. You can't tell from the information given.

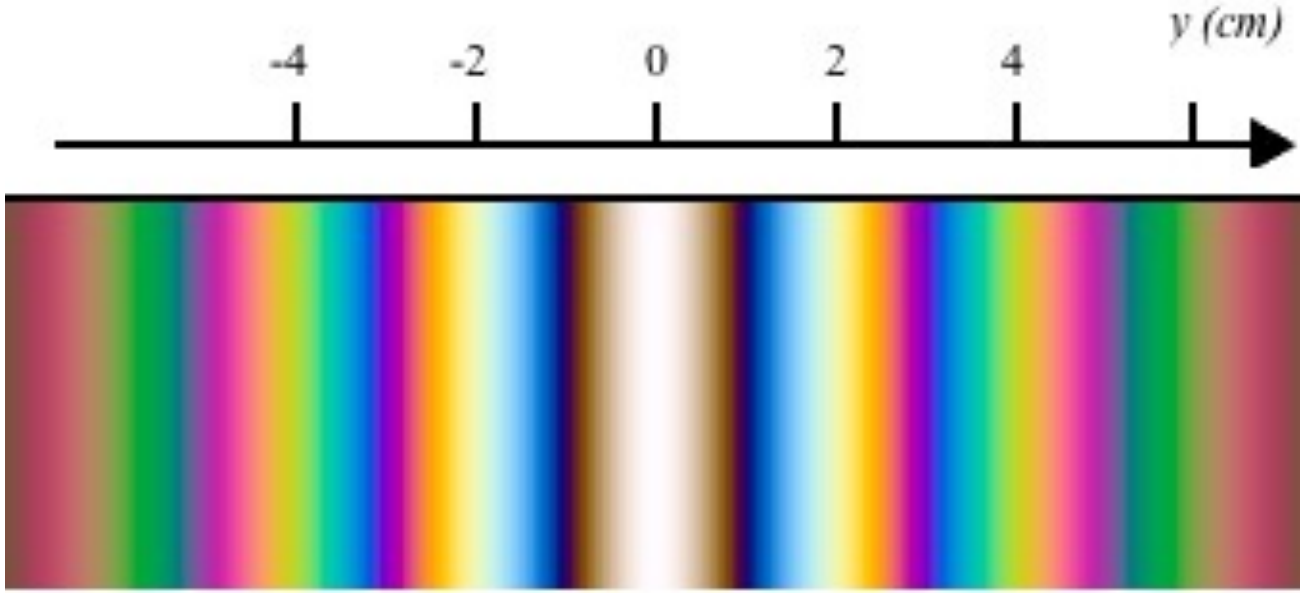


If the screen were moved closer to the slits, what would happen to pattern on the screen?

1. It would not change.
2. It would squeeze closer together.
3. It would spread further apart.
4. You can't tell from the information given.



The figure shows what happens if you put white light through the same slit-screen system. Why are the different colors separated on either side of the center?



A laser beam passes through a double-slit forming an interference pattern. If we cover one slit with a glass plate, the phase of the wave passing through the glass changes by 180° from what it would have been without the glass. How is the interference pattern changed?

1. The pattern of alternating light and dark spots disappears leaving a single, wide, bright spot.
2. The pattern of alternating light and dark spots disappears leaving the screen dark.
3. The pattern of bright spots spreads out.
4. The pattern of bright spots gets closer together.
5. The pattern reverses itself, bright becoming dark and vice versa.