

Collinear sources

Questions

1. Under what conditions is a bright band forms at the two points on the x -axis?
2. Under what conditions is a bright band forms at the two points on the y -axis?
3. Can a dark band be formed at the two points on the y -axis?
4. For a fixed distance between the sources (D), what happens to the number of bright/dark bands as the radius of the circular boundary is increased?
5. How would change in wavelength (λ) effect the number of bright/dark band (for fixed R and D) ?
(User defined wavelength will be available in the next version of the simulation)
6. For a fixed radius (R) of the circular boundary, what happens to the number of bright/dark bands as distance between the sources (D) is increased?

Note :

Questions given above may be visualized and solved using the simulations. However, obtaining a mathematical solution is to be always treated as the final answer and obtaining such a mathematical solution implies a deeper understanding and application of the concept.

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