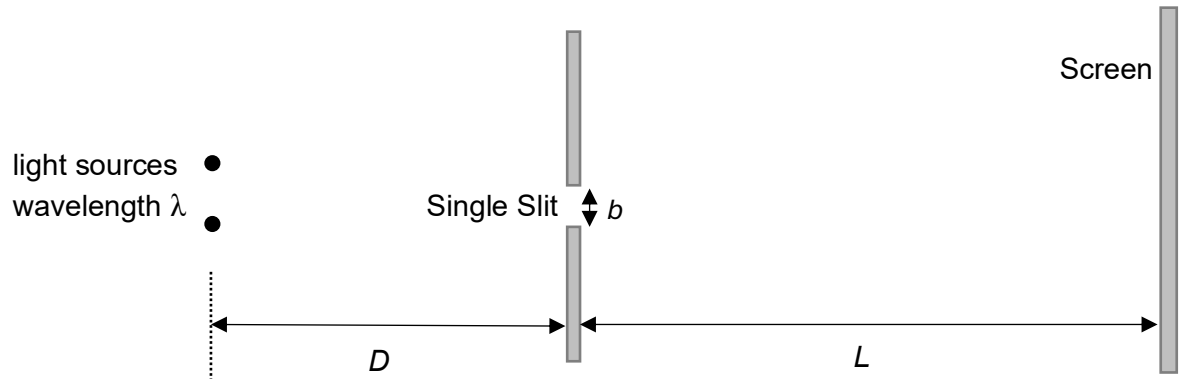


- 16** Two monochromatic light sources of wavelength  $\lambda$  are separated by a fixed distance. Light from the sources pass through a single slit of width  $b$  at a distance of  $D$ . The image of the light sources is projected on a screen at a distance  $L$  from the single slit.



One is just able to distinguish that there are two light sources from the image captured on the screen.

For the image captured on screen, which of the following changes will make it easier to distinguish that there are two light sources?

- |                                  |                            |
|----------------------------------|----------------------------|
| <b>A</b> $\lambda$ is increased. | <b>B</b> $D$ is reduced.   |
| <b>C</b> $b$ is decreased.       | <b>D</b> $L$ is increased. |

