**Unit 5 – Waves: Quiz 2a**

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1. A double slit is illuminated with monochromatic light of wavelength 6.00 × 102 nm. The m = 0 and m = 1 bright fringes are separated by 3.0 cm on a screen which is located 4.0 m from the slits. What is the separation between the slits?



*Use the image above to answer the next two questions:*

1. Which fringe is the same distance from both slits?

A, B, C, D, or E

1. Which one of the following phenomena would be observed if the wavelength of light were increased?
2. *The fringes would be brighter.*
3. *More bright fringes would appear on the screen.*
4. *The distance between dark fringes would decrease.*
5. *Single-slit diffraction effects would become non-negligible.*
6. *The separation between bright fringes would increase.*

Answers:

1. 
2. Which fringe is the same distance from both slits?

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