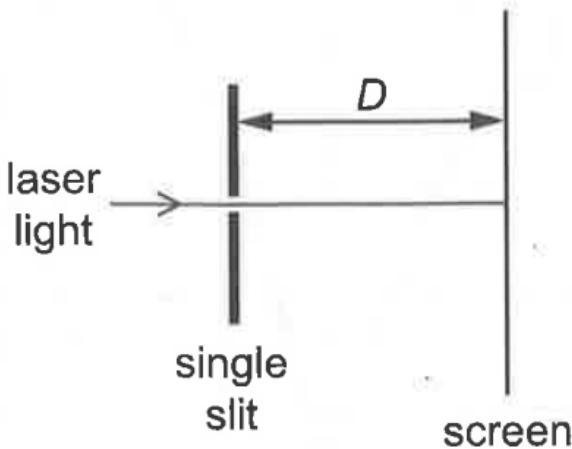


- 16 Laser light of frequency f passes through a single slit. The resulting diffraction pattern is observed on a screen. The width of the central maximum is x . The distance D between the single slit and the screen is much greater than the slit width.



What is the correct expression for the slit width?

A $\frac{cx}{2Df}$

B $\frac{cx}{Df}$

C $\frac{cD}{fx}$

D $\frac{2cD}{fx}$

- 17 Monochromatic light of wavelength 500 nm is directed perpendicularly onto a diffraction grating.