

- 2** A double-slit interference experiment is used to determine the wavelength of light from a monochromatic source. The following measurements are used.

slit separation  $a = 0.50 \text{ mm} \pm 4\%$

fringe separation  $x = 1.7 \pm 0.1 \text{ mm}$

distance between slits and screen  $D = 2.000 \pm 0.002 \text{ m}$

What is the percentage uncertainty in the calculated wavelength?

- A**    0.1%                      **B**    1%                      **C**    6%                      **D**    10%