

- 17** Fringes of separation  $x$  are observed in a plane 1.00 m away from a Young's double-slit arrangement illuminated by yellow light of wavelength 600 nm.

At what distance from the slits would fringes of the separation  $2x$  be observed when using blue light of wavelength 400 nm?

**A** 1.00 m

**B** 1.50 m

**C** 1.33 m

**D** 3.00 m