Exercise

Light with wavelength 442 nm passes through a double-slit system that has a slit separation 0.400 mm. Determine how far away a screen must be placed so that dark fringes appear directly opposite both slits, with only one bright fringe between them.

Exercise

Two narrow, parallel slits separated by 0.850 mm are illuminated by 600 nm light, and the viewing screen is 2.80 m away from the slits. What is the ratio of the intensity at this point to the intensity at the center of a bright fringe?

Television signal interference