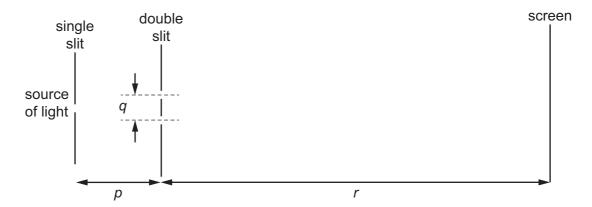
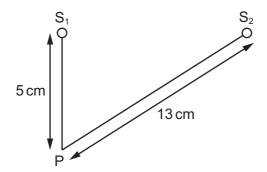
25 A teacher sets up the apparatus shown to demonstrate a double-slit interference pattern on the screen.



Which change to the apparatus will increase the fringe spacing?

- **A** decreasing the distance *p*
- **B** decreasing the distance q
- $\bf C$ decreasing the distance r
- **D** decreasing the wavelength of the light
- **26** The diagram shows two sources of waves S_1 and S_2 . The sources oscillate with a phase difference of 180° .



The sources each generate a wave of wavelength 2.0 cm. Each source produces a wave that has amplitude x_0 when it reaches point P.

What is the amplitude of the oscillation at P?

- **A** 0
- $\mathbf{B} \quad \frac{x_0}{2}$
- **C** *x*₀
- **D** $2x_0$