16 Light of wavelength λ is emitted from two point sources R and S and falls onto a distant screen.

At point P on the screen, the light intensity is zero.

What could explain the zero intensity at P?

A Light from the two sources is emitted 180° out of phase and the path difference to P is λ .

B Light from the two sources is emitted 180° out of phase and the path difference to P is $\frac{1}{2}\lambda$.

C Light from the two sources is emitted 90° out of phase and the path difference to P is λ.

D Light from the two sources is emitted in phase and the path difference to P is λ.