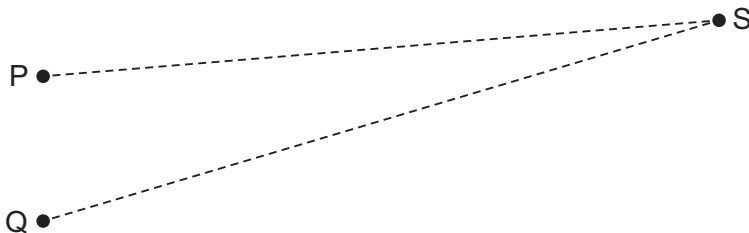


- 29** Two sources of microwaves P and Q produce coherent waves with a phase difference of 180° . The waves have the same wavelength λ .



At the point S there is a minimum in the interference pattern produced by waves from the two sources. The distance $(QS - PS)$ is called the path difference.

In the expressions shown, n is an integer.

Which expression represents the path difference?

- A** $n\lambda$ **B** $\frac{1}{2}n\lambda$ **C** $(n + \frac{1}{2})\lambda$ **D** $(2n + \frac{1}{2})\lambda$

- 30** A parallel beam of monochromatic light of wavelength λ is incident normally on a diffraction