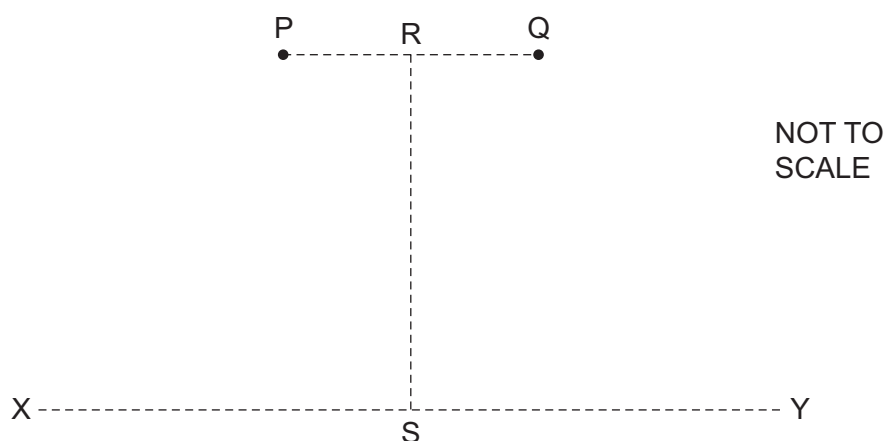


- 28 P is a source emitting infra-red radiation and Q is a source emitting ultra-violet radiation. The figures in the table are suggested values for the wavelengths emitted by P and Q.

Which row is correct?

	wavelength emitted by P / m	wavelength emitted by Q / m
<b>A</b>	$5 \times 10^{-5}$	$5 \times 10^{-8}$
<b>B</b>	$5 \times 10^{-5}$	$5 \times 10^{-10}$
<b>C</b>	$5 \times 10^{-7}$	$5 \times 10^{-8}$
<b>D</b>	$5 \times 10^{-7}$	$5 \times 10^{-10}$

- 29 Coherent waves are produced at P and at Q and travel outwards in all directions. The line RS is halfway between P and Q and perpendicular to the line joining P and Q. The distance RS is much greater than the distance PQ.



Along which line, or lines, is an interference pattern observed?

- A** both RS and XY
- B** RS only
- C** XY only
- D** neither RS nor XY

**Space for working**