

**29** To produce a stationary wave, two waves must travel in opposite directions through the same space.

Which statement about the properties of the two waves must also be true?

- A** The waves must have equal frequency, but a different speed and wavelength.
- B** The waves must have equal speed, but a different wavelength and frequency.
- C** The waves must have equal speed, frequency and wavelength.
- D** The waves must have equal wavelength, but a different speed and frequency.

**30** A diffraction grating is used to measure the wavelength of monochromatic light, as shown in the diagram below.