

**20** A wave of a single wavelength is passed through a gap in a barrier and undergoes diffraction.

The angle at which the first minimum appears is less than  $90^\circ$ .

Which combination of changes in gap size and wavelength **must** reduce the angle of diffraction?

|   | gap size | wavelength |
|---|----------|------------|
| A | decrease | decrease   |
| B | decrease | increase   |
| C | increase | decrease   |
| D | increase | increase   |

**21** An electron is initially at rest in a uniform electric field.