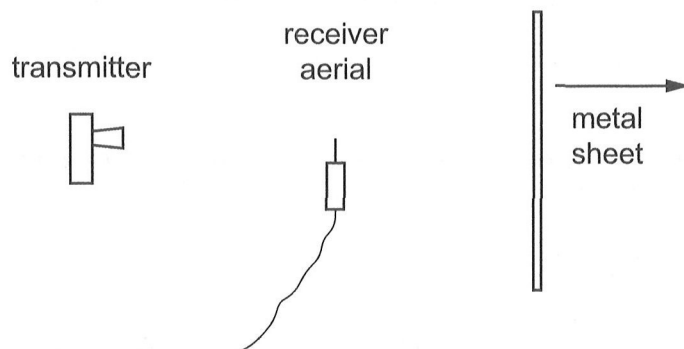
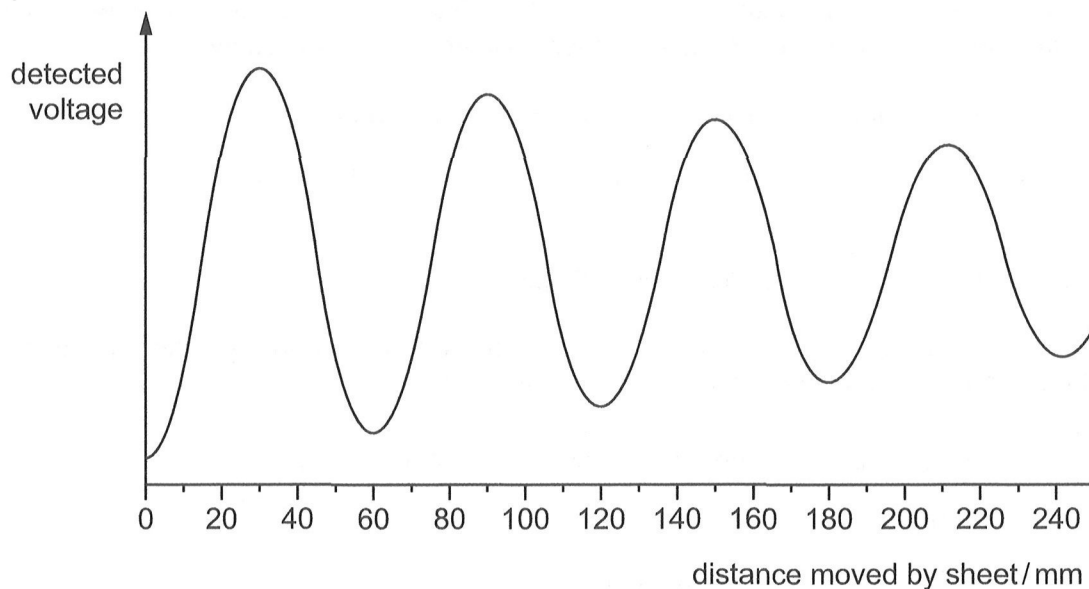


- 18 A receiver aerial is placed on a laboratory bench between a transmitter emitting microwaves at a single fixed frequency and a metal sheet.



The metal sheet is moved away from the aerial. The detected voltage at the receiver aerial varies with the distance moved by the sheet as shown.



What is the wavelength of the microwaves?

- A 30 mm      B 60 mm      C 120 mm      D 180 mm

- 19 Light of frequency  $6.0 \times 10^{14}$  Hz passes through a diffraction grating with  $4.0 \times 10^3$  lines per