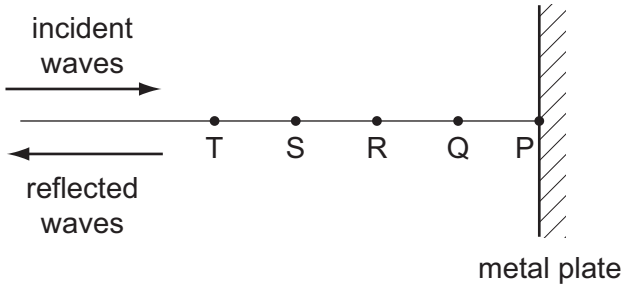
26 A microwave transmitter emits waves towards a metal plate. The waves strike the plate and are reflected back along their original path.



A microwave detector is moved along the line PT.

Points P, Q, R, S and T are the positions where minima of intensity are observed. These points are found to be 15 mm apart.

What is the frequency of the microwaves?

A 5.0 GHz **B** 6.7 GHz **C** 10 GHz **D** 20 GHz

27 A double slit experiment, using light of wavelength 600 nm, results in fringes being produced on a screen. The fringe separation is found to be 1.0 mm.

When the distance between the double slits and the viewing screen is increased **by** 2.0 m, the fringe separation increases **to** 3.0 mm.

What is the separation of the double slits producing the fringes?

A 0.4 mm **B** 0.6 mm **C** 0.9 mm **D** 1.2 mm

Space for working