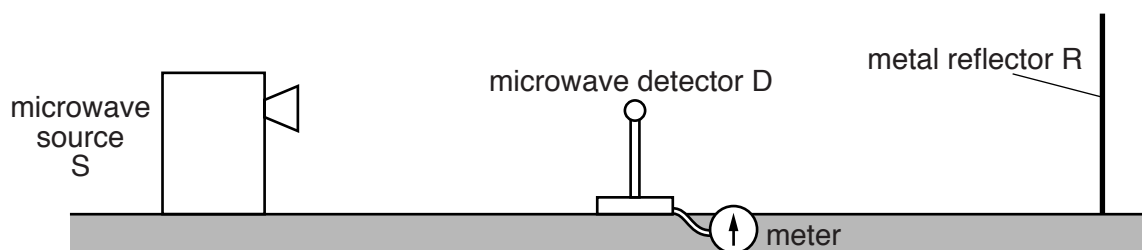


6 (a) State two differences between progressive waves and stationary waves.

1. ....  
.....
2. ....  
.....
- [2]

(b) A source S of microwaves is placed in front of a metal reflector R, as shown in Fig. 6.1.



**Fig. 6.1**

A microwave detector D is placed between R and S.

Describe

(i) how stationary waves are formed between R and S,

- .....  
.....  
.....  
.....
- [3]

(ii) how D is used to show that stationary waves are formed between R and S,

- .....  
.....  
.....
- [2]

(iii) how the wavelength of the microwaves may be determined using the apparatus in Fig. 6.1.

- .....  
.....  
.....
- [2]