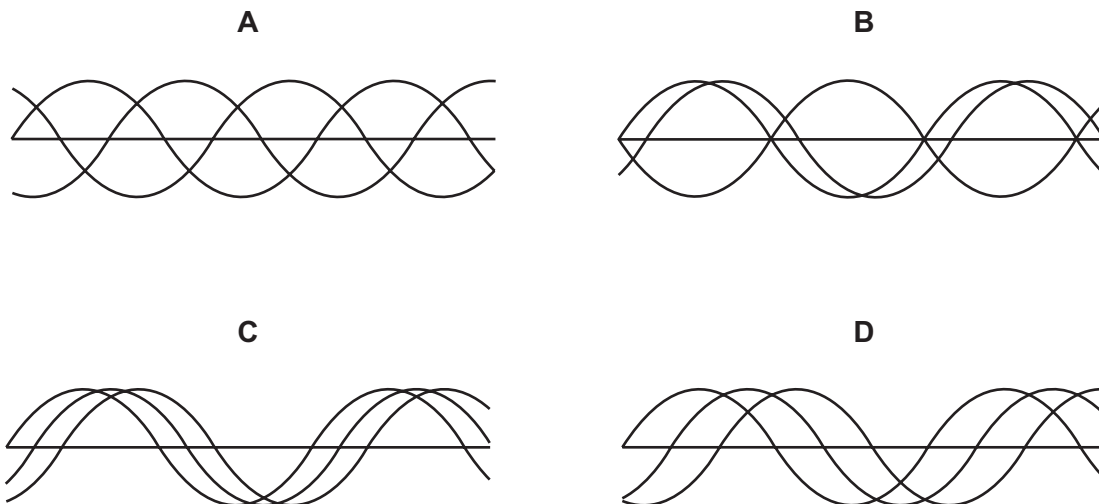


- 27** The three waves shown in each diagram have the same amplitude and frequency but different phase.

They are added together to give a resultant wave.

In which case is the resultant wave zero at this instant?



- 28** A transmitting mast sends out microwaves of wavelength 1.5 cm and radio waves of wavelength 1.5 km.



A receiving aerial behind a mountain can detect the radio waves but not the microwaves.

What is the reason for this?

- A** The radio waves are coherent but the microwaves are not.
- B** The radio waves are diffracted around the mountain but the microwaves are not.
- C** The radio waves are reflected by the mountain but the microwaves are not.
- D** The radio waves travel at the speed of light but the microwaves do not.