

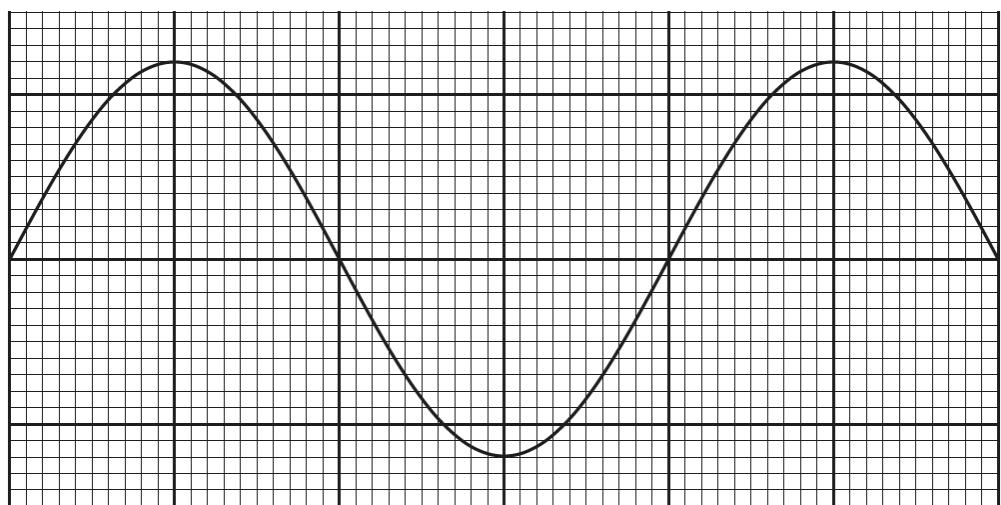
- 4 (a) Sketch, on Fig. 4.1, a standing wave with 4 antinodes only.



Fig. 4.1

[2]

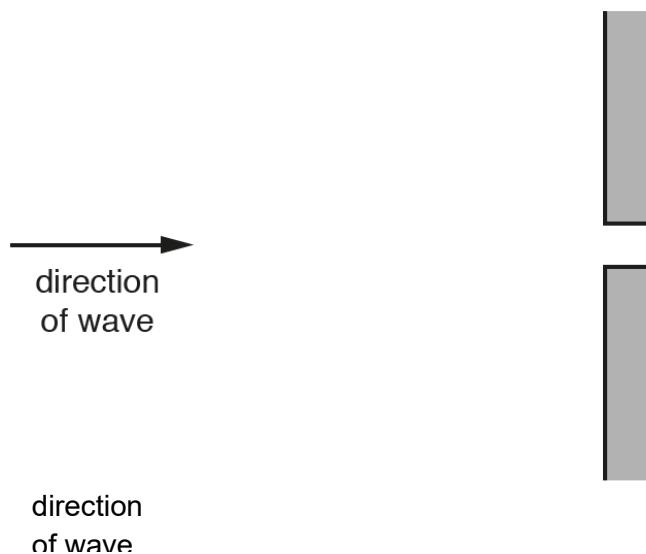
- (b) Draw, on Fig. 4.2, a wave that is  $90^\circ$  out of phase with the wave shown.



**Fig. 4.2**

[2]

- (c) Sketch, on Fig. 4.3, the diffraction of a plane wave passing through a gap that is smaller than the wavelength of the wave.



**Fig. 4.3**

[3]

