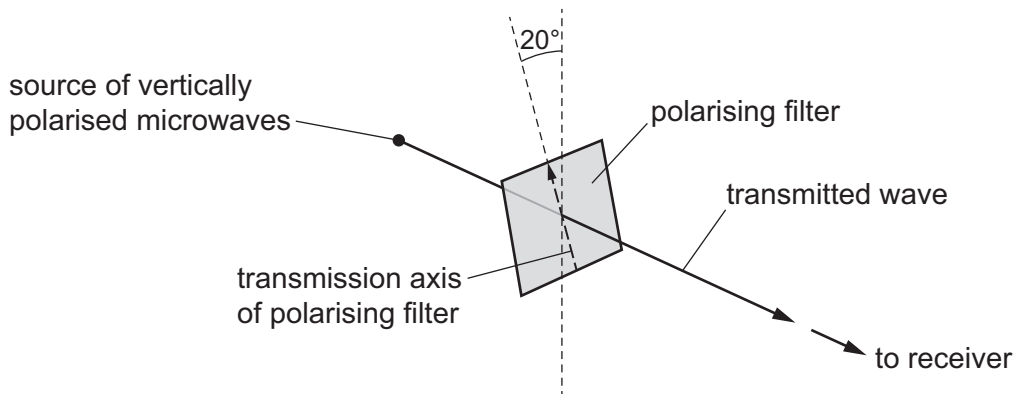


- 24** Vertically polarised microwaves are emitted from a source. The microwaves are detected by a receiver that is connected to a cathode-ray oscilloscope (CRO). The waveform displayed on the screen of the CRO has an amplitude of 2.6 cm.

A metal wire grid that acts as a polarising filter is now placed between the source and the receiver. The filter is orientated so that the plane of polarisation of the transmitted wave is at an angle of  $20^\circ$  to the vertical.



The distance between the source and receiver is unchanged. The settings on the CRO are also unchanged.

What is now the amplitude of the waveform displayed on the screen of the CRO?

- A** 0.30 cm      **B** 0.89 cm      **C** 2.3 cm      **D** 2.4 cm