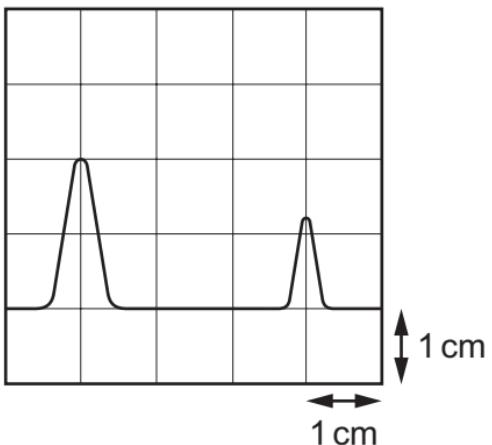


- 5 A transmitter emits a pulse of electromagnetic waves towards a reflector. The pulse is reflected and returns to the transmitter.

A detector is located at the transmitter. The emitted pulse and the reflected pulse are displayed on a cathode-ray oscilloscope (c.r.o.) as shown.



The pulse takes  $6.3\ \mu\text{s}$  to travel from the transmitter to the reflector.

What is the time-base setting of the c.r.o.?

- A  $2.1\ \mu\text{s}\ \text{cm}^{-1}$       B  $3.2\ \mu\text{s}\ \text{cm}^{-1}$       C  $4.2\ \mu\text{s}\ \text{cm}^{-1}$       D  $6.3\ \mu\text{s}\ \text{cm}^{-1}$