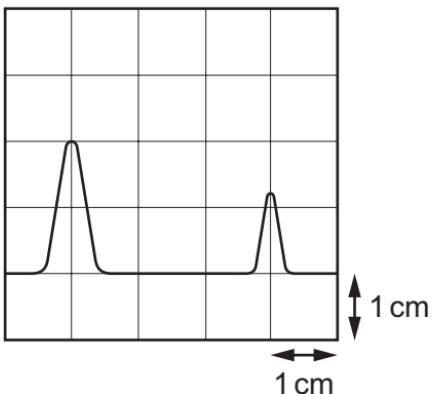


- 4 A transmitter emits a pulse of electromagnetic waves towards a reflector. The pulse is reflected and returns to the transmitter.

A detector is located at the transmitter. The emitted pulse and the reflected pulse are displayed on a cathode-ray oscilloscope (CRO) 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 CRO?

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