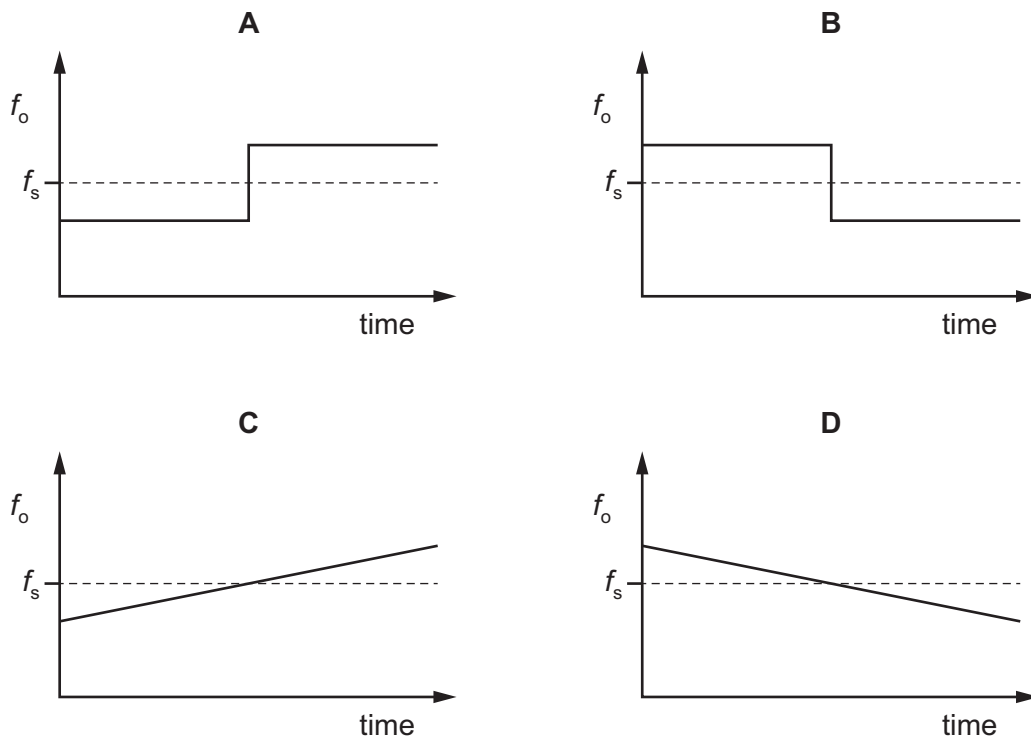


- 25** A source emitting sound of a single frequency  $f_s$  travels at constant speed directly towards an observer. The source then passes the observer and continues to move directly away from the observer. The velocity of the source remains constant.

Which graph represents the variation with time of the frequency  $f_o$  of the sound heard by the observer?



- 26** What are the names of the electromagnetic waves that have wavelengths in a vacuum of  $100\text{ pm}$  and of  $100\text{ }\mu\text{m}$ ?

	wavelength $100\text{ pm}$	wavelength $100\text{ }\mu\text{m}$
<b>A</b>	$\gamma$ -rays	infrared
<b>B</b>	$\gamma$ -rays	red light
<b>C</b>	X-rays	infrared
<b>D</b>	X-rays	red light