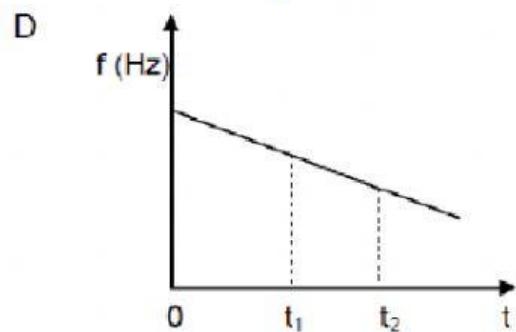
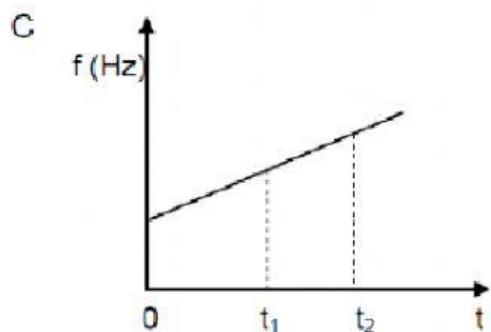
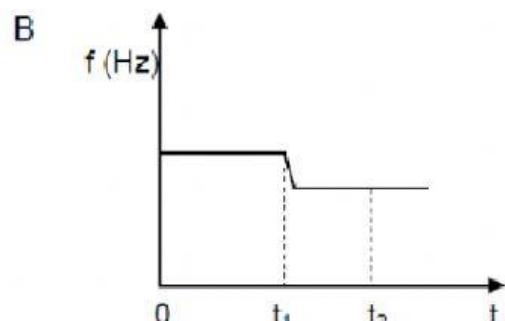
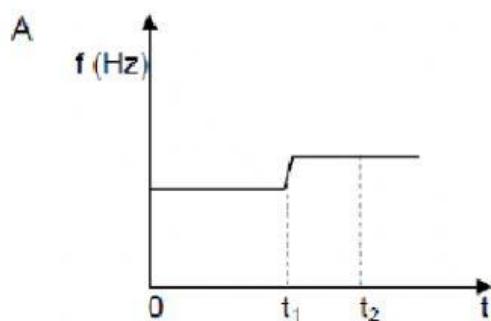


5.

A car sounds its horn whilst travelling at constant velocity along a straight road. At time  $t = 0$  the car is at position X as shown below. At time  $t = t_1$  the car moves past a stationary listener L. At time  $t = t_2$  the car is at position Y.



Which ONE of the following graphs best represents the variation of the frequency (pitch) of the horn with time as heard by the listener?



6.

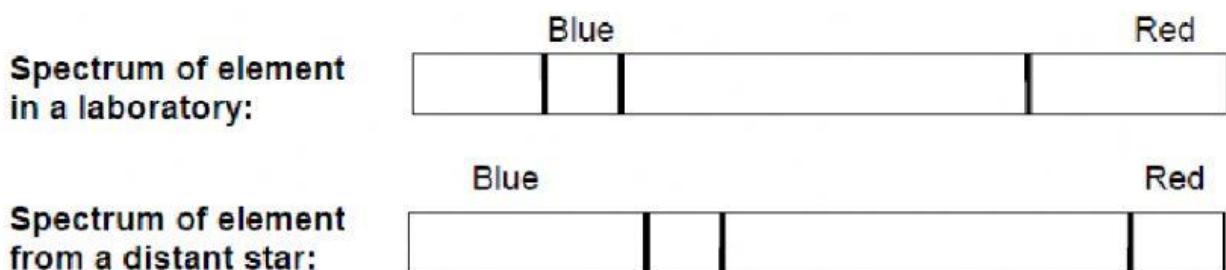
The hooter of a car emits sound of constant frequency as the car moves away from a stationary listener.

Which ONE of the following properties of the sound heard by the listener will NOT change?

- A Velocity
- B Frequency
- C Both wavelength and frequency
- D Both frequency and loudness

7.

Astronomers obtained the following spectral lines of an element:



The observation confirms that the ...

- A star is moving closer towards earth.
- B earth is moving towards the star.
- C temperature of earth is increasing.
- D universe is expanding.

## Homework:

Pg 356 Q8 and Q6

Pg 357 Q7 and Q6

Pg 358 Q 6 and Q7

Pg 359 Q6 and Q8

Pg 360 Q7 and 3.3

Pg 361 Q8 (both) – these are the trickier questions. I will make a little video of these 2 when you are done ☺