

$$f_d = f_s \frac{V - V_d}{V - V_s}$$

the coordinate system so that the **positive direction is from the source to the detector** (= sound direction + >>)

solve the four cases of the car and ambulance considering your car velocity 22 m/s , ambulance velocity 28 m/s , ambulance siren frequently is 512 Hz and sound velocity 343 m/s. what frequency would you hear in the car?

