

**Doppler Effect Example** You are on the road driving at  $35 \text{ m/s}$ . An ambulance approaches you from behind traveling at  $42 \text{ m/s}$ . The sirens on the ambulance emit a frequency of  $890 \text{ Hz}$ .

- (a) What frequency do you hear?
- (b) After the ambulance passes you, what frequency do you hear?