

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## MCHS Honors Physics 2013-2014

### Waves and Sound 1

- When an automobile moves towards a listener, the sound of its horn seems relatively
  - low pitched
  - high pitched
  - normal
- When the automobile moves away from the listener, its horn seems
  - low pitched
  - high pitched
  - normal
- The changed pitch of the Doppler effect is due to changes in
  - wave speed
  - wave frequency
- Circle the letter of each statement about the Doppler Effect that is true.
  - It occurs when a wave source moves towards an observer.
  - It occurs when an observer moves towards a wave source.
  - It occurs when a wave source moves away from an observer.
  - It occurs when an observer moves away from a wave source.
- True / False: A moving wave source does not affect the frequency of the wave encountered by the observer.
- True / False: A higher frequency results when a wave source moves towards an observer.
- Two fire trucks with sirens on speed towards and away from an observer as shown below.



- Which truck produces a higher than normal siren frequency?
- Which truck produces a lower than normal siren frequency?