## Homework 21

- 1. Speed of sound in water 1450m/s . What is the distance between two closest pints oscillating in the opposite phases (the phase difference is  $\pi$ ) if the oscillation frequency is equal to 725Hz?
- 2. What is the train velocity v at which the 44 cm long pendulum starts oscillating at high amplitude if the distance between the rail connections is 25m?
- 3. The speed of the waves is 360m/s at the frequency of 450Hz. What is the difference of oscillation phases between two points separated by 20cm?