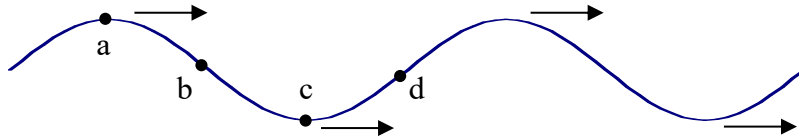
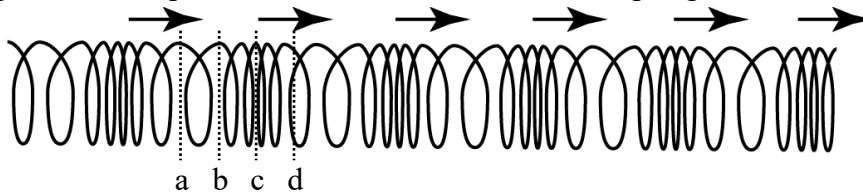

PHYS 1210 Worksheet. Waves

1. The transverse displacements in a stretched cord travel from left to right.



- In what direction is the cord at positions a, b, c, and d *moving*?
- In what direction is the cord at positions a, b, c, and d *accelerating*?

2. The longitudinal compressions and rarefactions in a coil spring travel from left to right.



- In what direction are the coils at positions a, b, c, and d *accelerating*?
 - In what direction are the coils at positions a, b, c, and d *moving*?
3. A wave has an angular frequency of 4π rad/s and a wavelength of 0.3 m.
- What is the angular wavenumber k of the wave?
 - What is the period T of the wave?
 - What is the propagation speed v of the wave?
 - Do you need more information to find the equation of position of the medium at a time and place?

