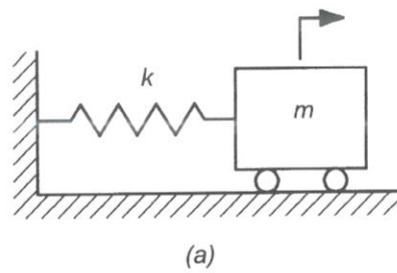
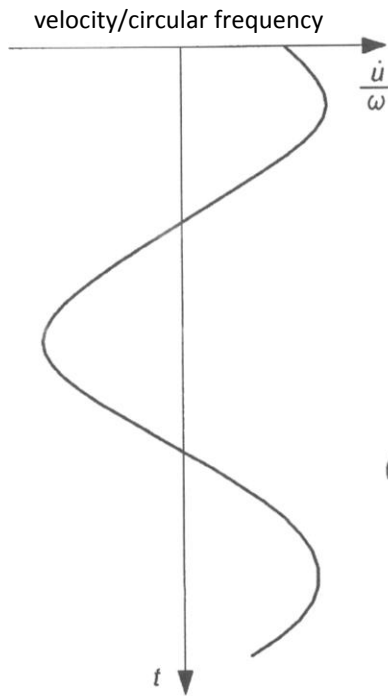
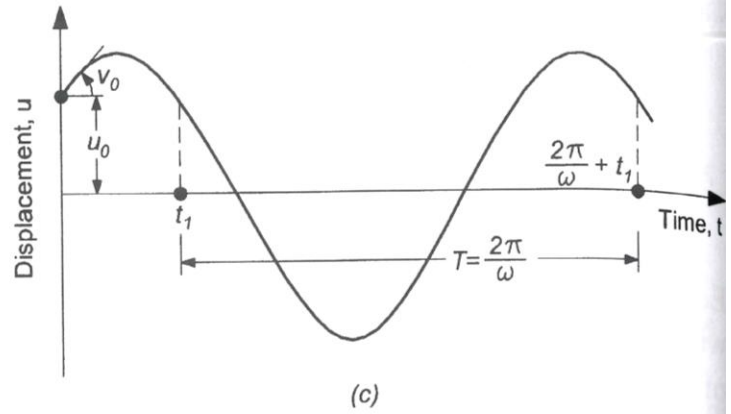
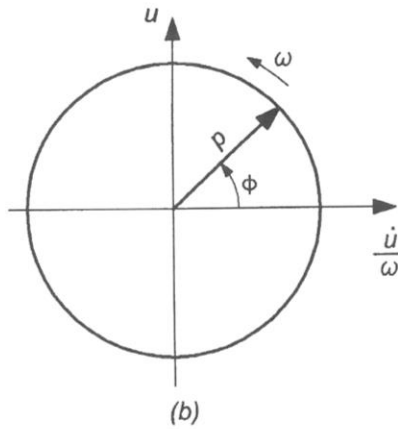


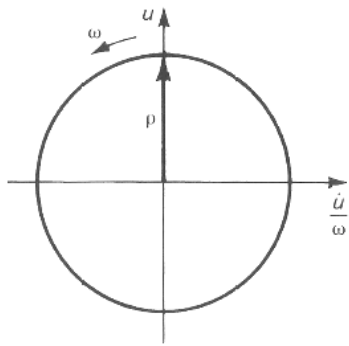
Handout #1

Free undamped vibration of a single-degree-of-freedom system.

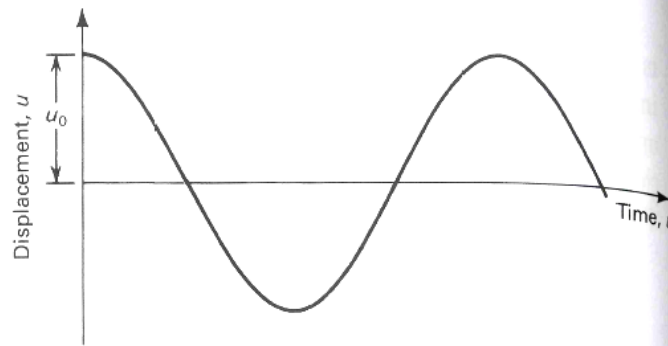


**Handout #2**

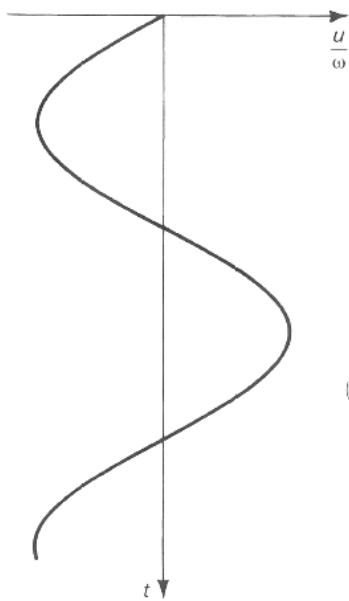
Free vibration from initial displacement



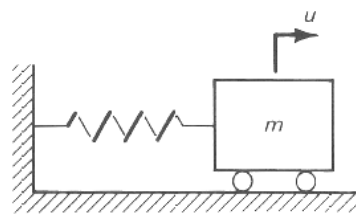
(b)



(c)



(d)



(a)

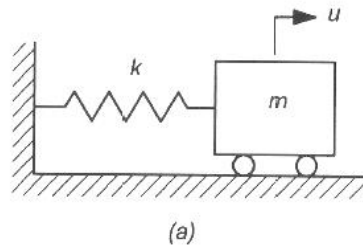
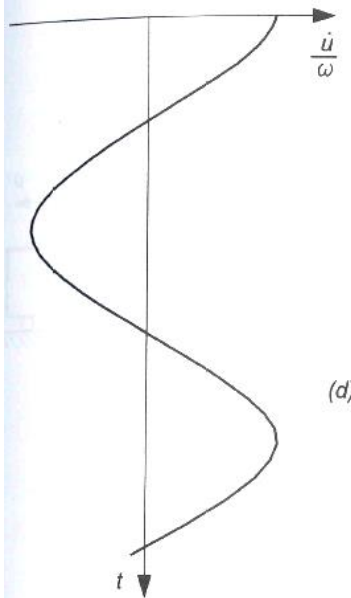
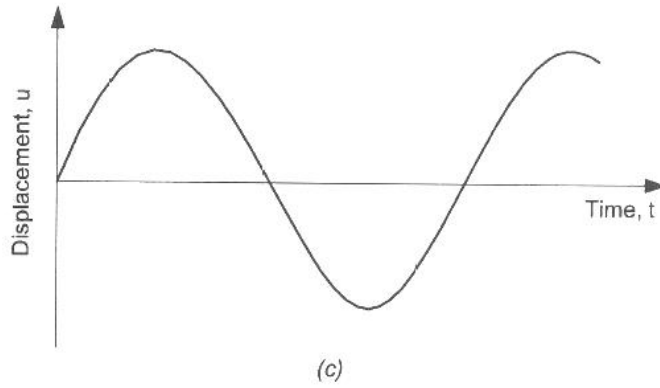
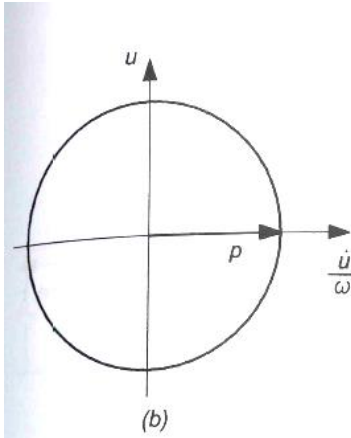
$$\left. \begin{aligned} u &= u_0 \\ \dot{u} &= 0 \end{aligned} \right\} t = 0$$

Reference:

Humar, J. L. (2012). Dynamics of structures. 2<sup>nd</sup> ed., ISBN 9058092453, CRC Press.

**Handout #3**

Free vibration from initial velocity.



Handout #4

Response to a sudden movement of support.

