## Homework Assignment #32

(due Nov. 30, 2022, at the beginning of class)

- 1. Griffiths 7.1
- 2. Griffiths 7.7

Hints:

- For (c) you will need to get a differential equation for  $v_x(t)$ . You get this DE by using  $\mathbf{F}_{\text{net}} = m\mathbf{a} = m\frac{\mathrm{d}\mathbf{v}}{\mathrm{d}t}$
- For (d) use  $P = \frac{dW}{dt} = I^2R$  and use your results of (a) and (c) and then use  $W = \int \left(\frac{dW}{dt}\right) dt$
- 3. Griffiths 7.8