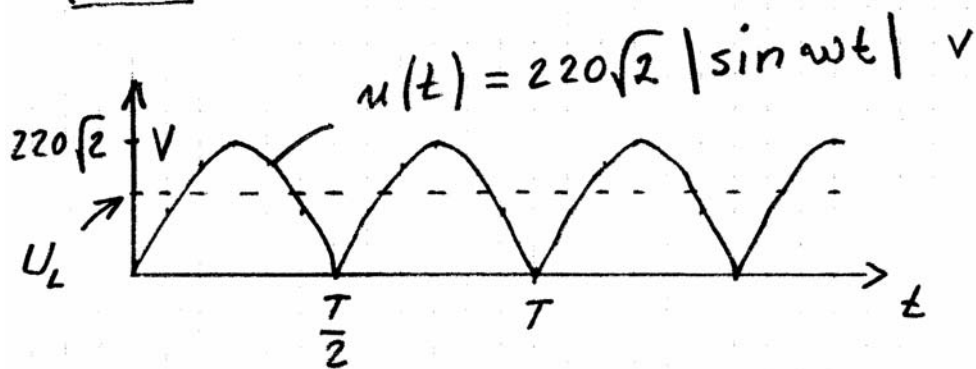


D18



$$U_L = \frac{1}{T} \int_0^T u(t) dt = \frac{2}{T} \int_0^{\frac{T}{2}} u(t) dt$$

YTAN UNDER PULS 1 OCH 2 ÄR LIKA STORA

$$U_L = \frac{2}{T} \int_0^{\frac{T}{2}} 220\sqrt{2} \sin \omega t dt = \left| T = \frac{2\pi}{\omega} \right| =$$

$$= \frac{2\omega}{2\pi} \int_0^{\frac{\pi}{\omega}} 220\sqrt{2} \sin \omega t dt =$$

$$= 220\sqrt{2} \cdot \frac{1}{\pi} \left[\frac{-\cos \omega t}{\omega} \right]_0^{\frac{\pi}{\omega}} =$$

$$= \frac{220\sqrt{2}}{\pi} [-\cos \pi + \cos 0] = 198 \text{ V}$$

$$I_L = U_L / R_L = 19,8 \text{ A}$$