Gabriel Emerson gte0002 HW13 Dre 4/7 5.35) i(t)=[5+2cos(4cot + 300)+0.5cos(808t-450)] Resister is 2KJZ Instant power consumption = $P(t) = i(t)^2 \cdot R = u(t)^2$ R: +[|x(t)|2 dt P(+)=[5+2cos(400++300)+B.5cos(800+450)]-2 = [25+4 cos² (400+ +300)+0.25 cos² (800+ 450)]-2 =>[50+8cos2(4cot+300)+0.5cos2(800t+450)] =>50+ 508cos (400t+300) + 5005 cos (800t+450) To = 21 since 21 is period of cas function

 $=50+\frac{2\pi}{2}+\frac{2\pi}{2}=50+\pi+\pi=50+2\pi \text{V}$