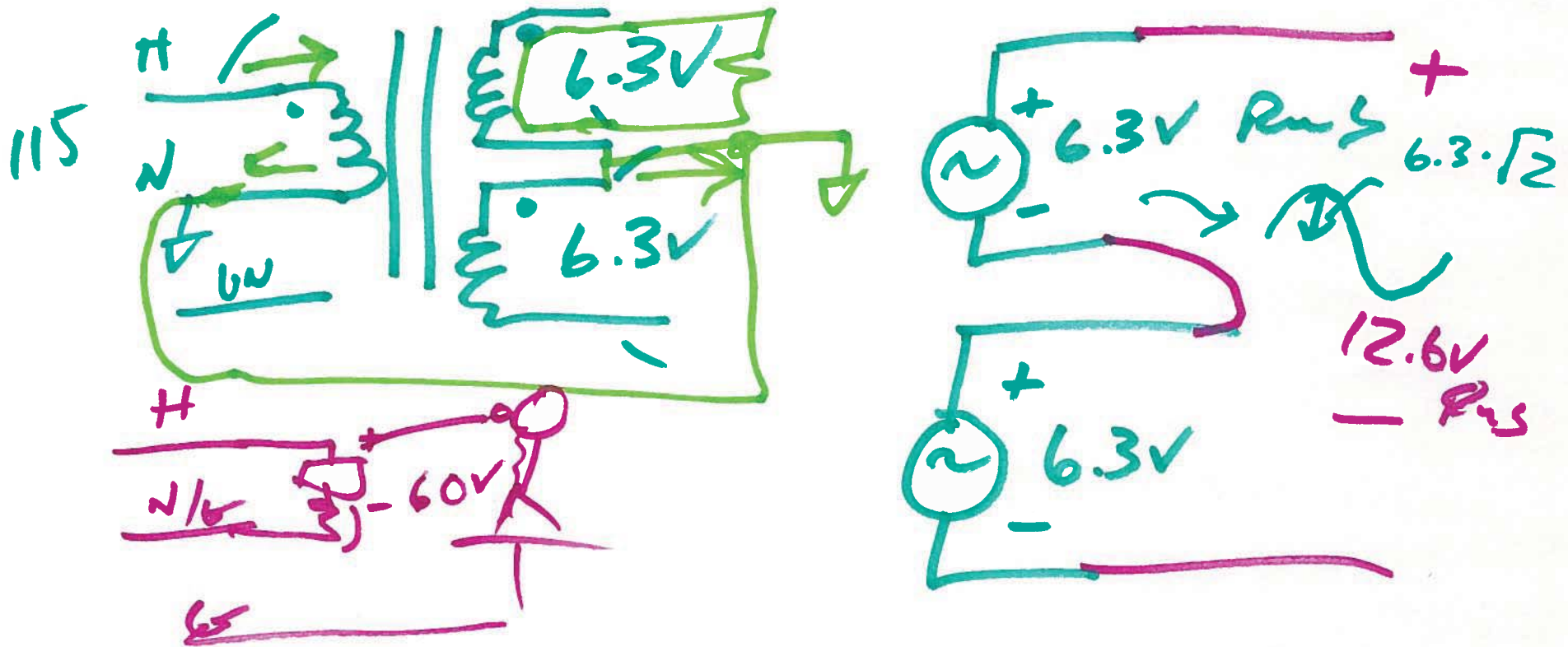
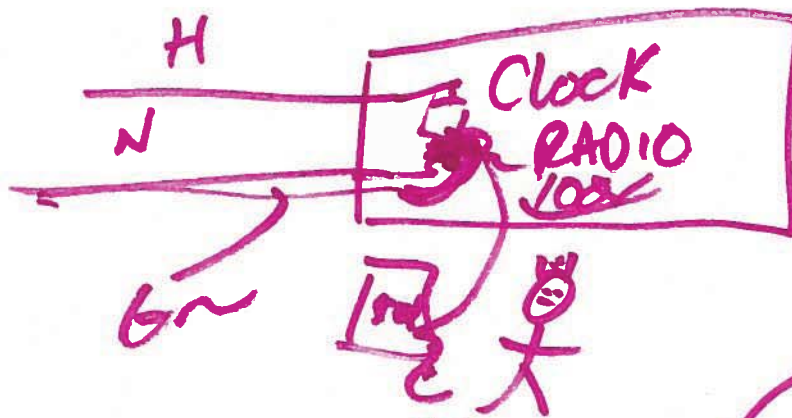
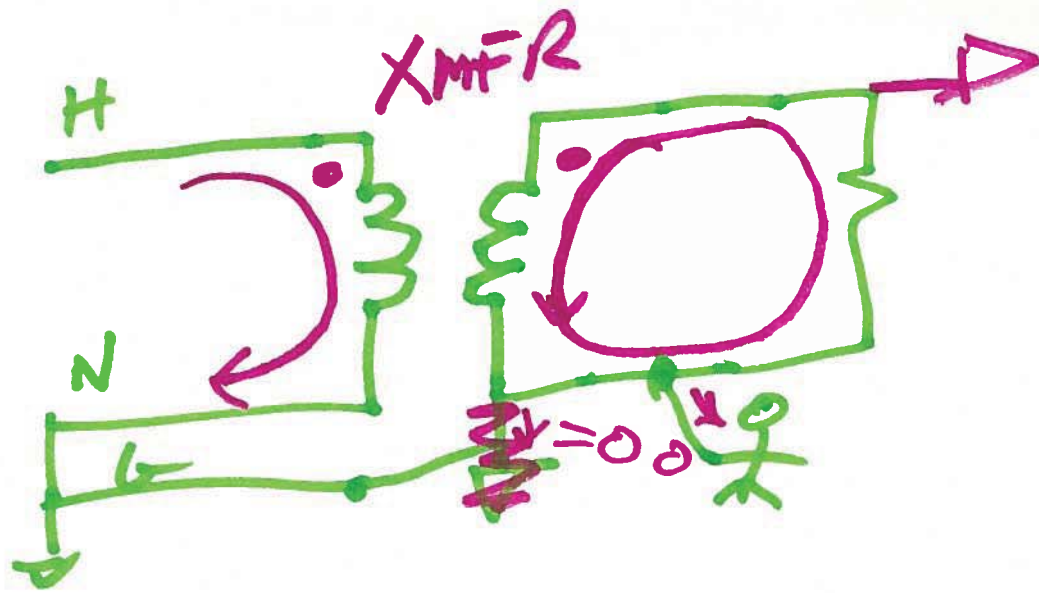


# EE 220 Circuits 1

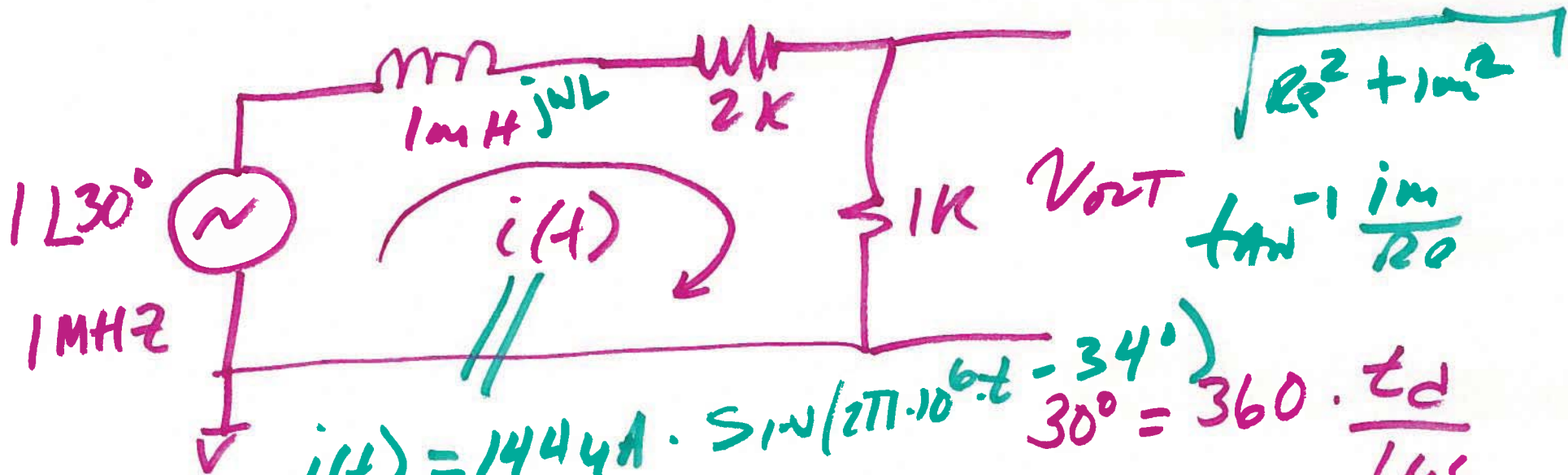
## Lecture 23

November 20, 2017



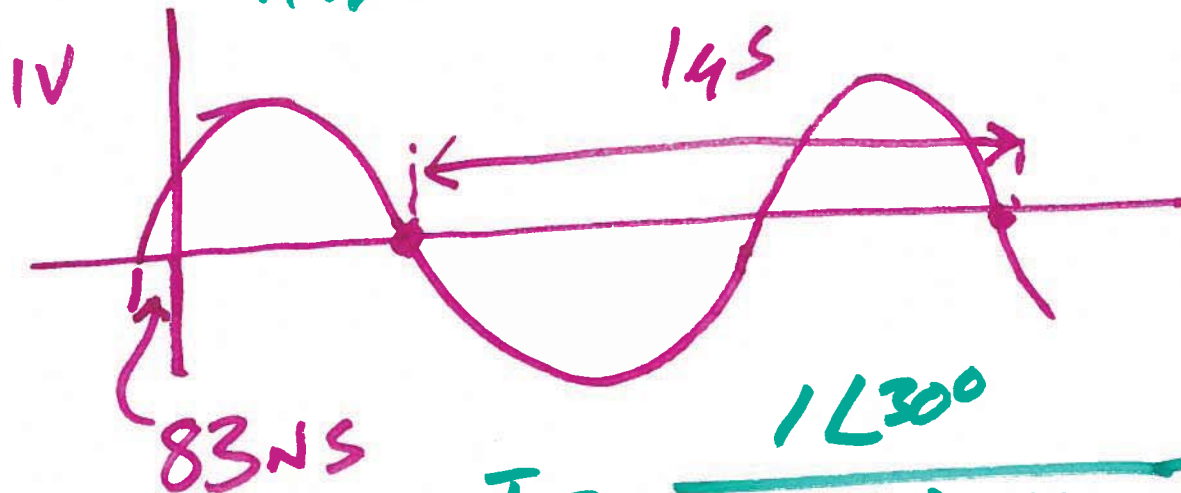


2)



$$i(t) = 1444\text{A} \cdot \sin(2\pi \cdot 10^6 \cdot t - 34^\circ)$$

$30^\circ = 360 \cdot \frac{t_d}{145}$



$$t_d = \frac{1}{12} 145$$

$$= 0.0825 145$$

$$= 83.5\text{ns}$$

$$I = \frac{1\angle 30^\circ}{3\text{K} + j \cdot 2\pi \cdot 10^6 \cdot 10^{-3}}$$

$$= \frac{1\angle 30^\circ}{3\text{K} + j 6.28\text{K}} = \frac{1\angle 30^\circ}{6.96\text{K} \angle 64^\circ}$$

$$I = 1444 \angle -34^\circ$$

3)