

EE-100 Lab Report: **Op Amp Gyrator Circuit Synthesis and Applications**

Name: _____

TA: _____

Section: _____

1-a)

R=430 Ω

E_0				
i_2				
V_{out}				

The saturation value of the op amp is $E_{sat} =$

1-b)

R=1 k Ω

E_0				
i_2				
V_{out}				

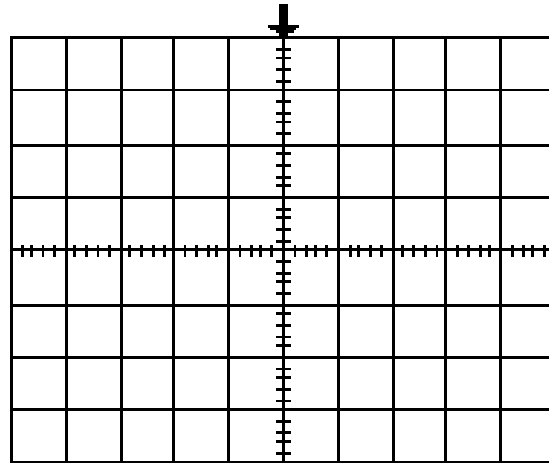
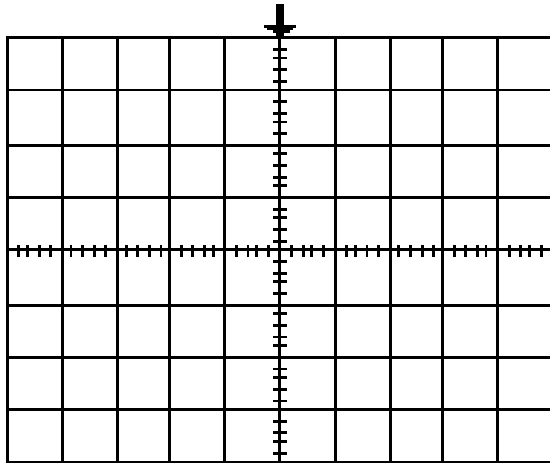
R=2 k Ω

E_0				
i_2				
V_{out}				

Condition for the linear region operation is:

Maximum load resistor value =

2-a)



Voltage and Current versus Time

Voltage versus Current (X/Y)

Conclusion (Does the circuit work as an inductor?):

2-b)

Inductance dependency on frequency [$Z_L = f(\omega)$]:

ω				
$L(\omega)$				

Frequency range for constant L is: