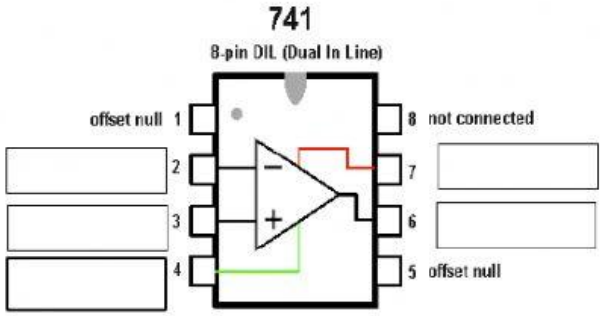
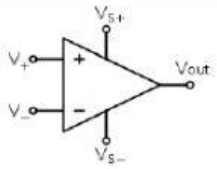
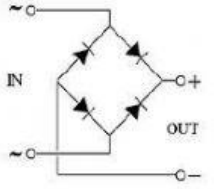
Electronics Principles and Applications M11: Operational Amplifier		Academic year 2019/20 Trimester 3-WS1

Name		Section	
ID		Date	

1) In the following Operation Amplifier, fill in the boxes with the proper pin name.
[Output, Non-Inverting Input, Inverting Input, V+ Power, V- Power]



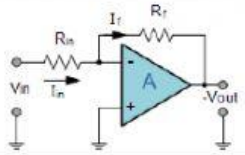
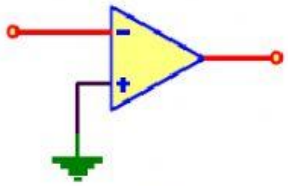
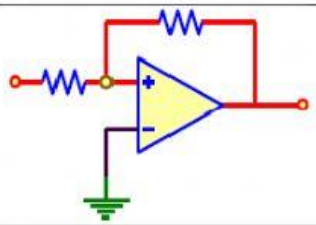
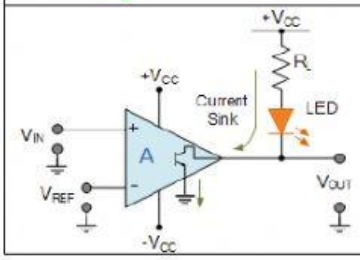
2) Tick the correct circuit symbol of the Operation Amplifier.

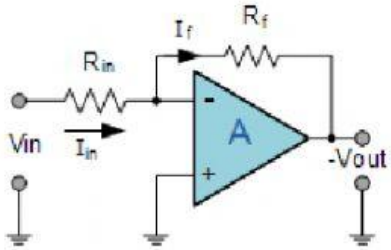
3) Tick the general equation that relates Operational Amplifier inputs to its outputs.

$A = (1 + R_2/R_1)$	$V_{out} = -\frac{R_f}{R_{in}} V_{in}$	$V_{out} = V_{in}\left(1 + \frac{R_2}{R_1}\right)$	Vout =A(Vn–Vi)	$Vout=R2\ (V2–V1)\ R1$

4) Classify the following Op-Amp circuit configurations. Tick the correct boxes.

circuit	open loop	closed loop	positive feedback	Negative feedback
				
				
				
				

5)Name then complete the formulla of each output of the following OP-AMP circuits. You are asked to Calculate the V_o , if $R_f = 10K\Omega$ and $R_i = 1K\Omega$.

Circuit and Formula	Name of circuit configuration and calculate Vout.
 $A = \frac{Vout}{Vin} =$	Let $V_{in}=1V$ ***Circuit con figuration:*** ***Vout=***