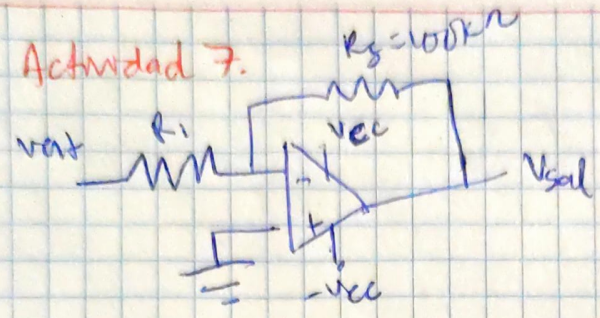
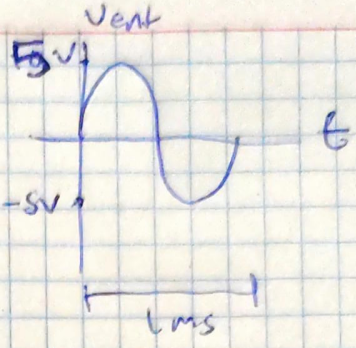
Emmanuel Buenrostro 223008a1 5°I

Actividad 7.

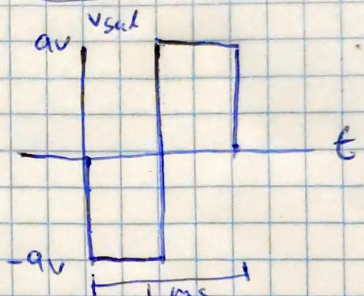
① 



Señal cuadrada → se satura → ganancia grande

$$A = \frac{-R_f}{R_1} = \frac{-100K\Omega}{R_1} \quad \text{con } R_1 = 1K\Omega$$

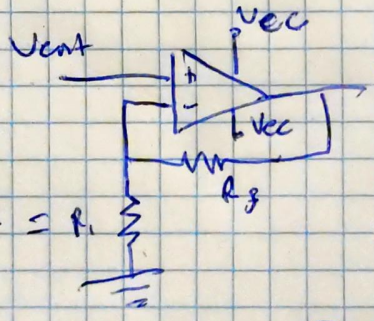
$$A = -\frac{100K\Omega}{1K\Omega} = -100$$



$$+V_{sat} = \frac{-V_{sat}}{2} = \frac{18V}{2} = 9V$$

$$-V_{sat} = \frac{V_{sat}}{2} = \frac{-18V}{2} = -9V$$

$$V_{cc} = \frac{10}{9} V_{sat} = \frac{10}{9}(9V) = +10V \qquad V_{ee} = \frac{10}{9} - V_{sat} = \frac{10}{9}(-9V) = -10V$$

② 

$$A = 1 + \frac{R_f}{R_1} = 101$$

$$\frac{R_f}{R_1} = 100 \Rightarrow R_f = 100R_1 = 100(1K\Omega) = 100K\Omega$$

$$+V_{sat} = \frac{V_{sal}}{2} = \frac{9}{2}V = 4.5V \qquad V_{cc} = \frac{10}{9} V_{sat} = \frac{10}{9}(4.5V) = 5V$$

$$-V_{sat} = \frac{-V_{sal}}{2} = \frac{-9}{2}V = -4.5V \qquad V_{ee} = \frac{10}{9}(-V_{sat}) = \frac{10}{9}(-4.5V) = -5V$$