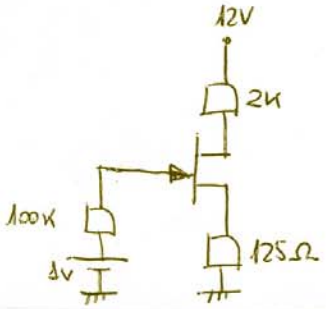
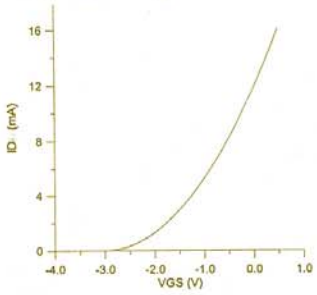
TRANSISTORES DE EFECTO CAMPO

PROBLEMAS DE JFET Y MOSFET

(1)

(1) Para el circuito de la figura, determinar V_{GSQ}, I_{DQ} y V_{DSQ}.





(2) Para el circuito de la figura 3, determinar los valores de R_G y R_S para que V_{DN} sea 12V.

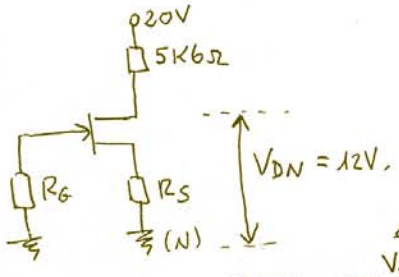
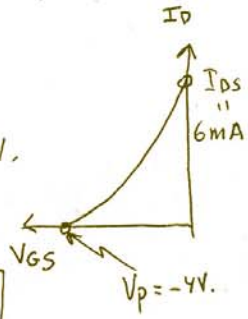


Figura 3



(3) Determinar los valores de I_D, R_D y V_{DS} para el circuito de la Figura 4.

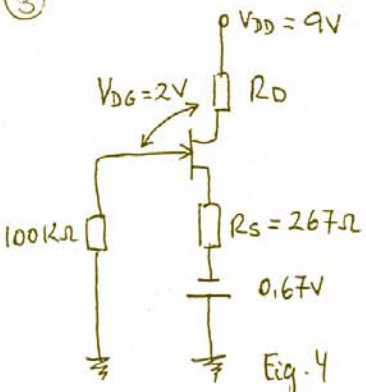
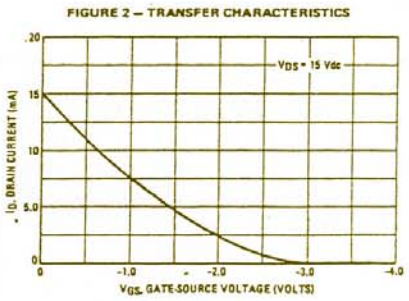
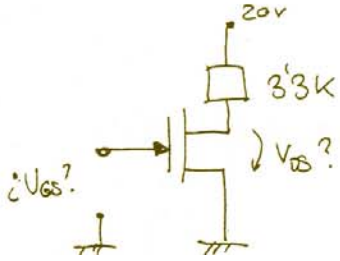


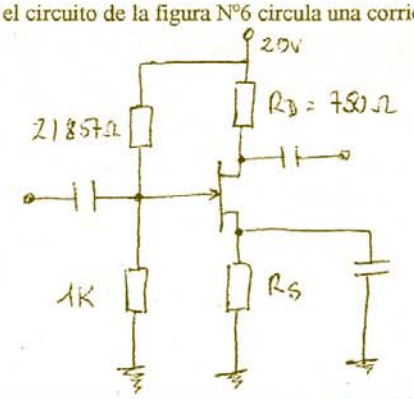
Fig. 4



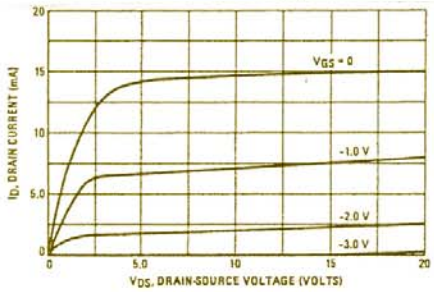
(4) Para el transistor de la figura se sabe que:
$V_P = -5$
$I_{DS} = 8$ mA
Determinar V_{GS} y V_{DS} para que $I_D = 3.2$ mA.

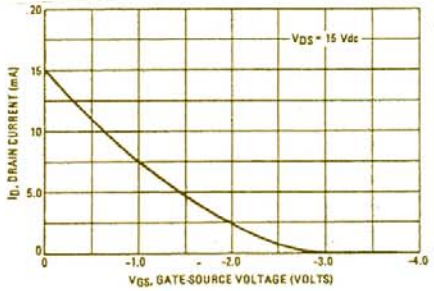


(5) Sabiendo que por el circuito de la figura Nº6 circula una corriente I_D de 7.5mA, determinar los valores de V_{DSQ} y R_S.

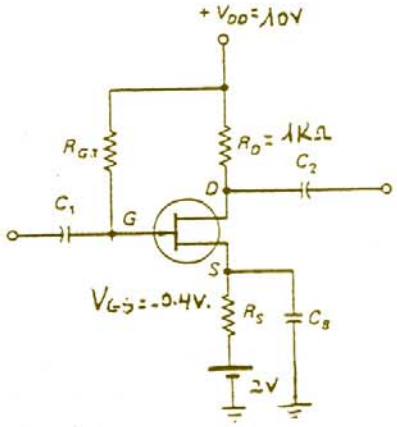


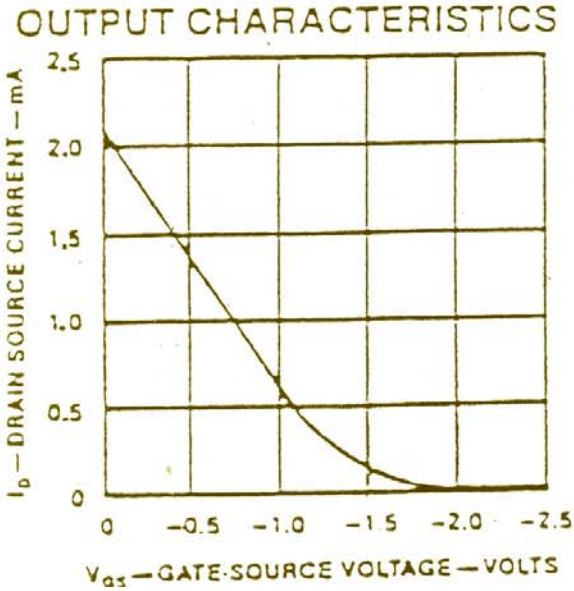
Nº6

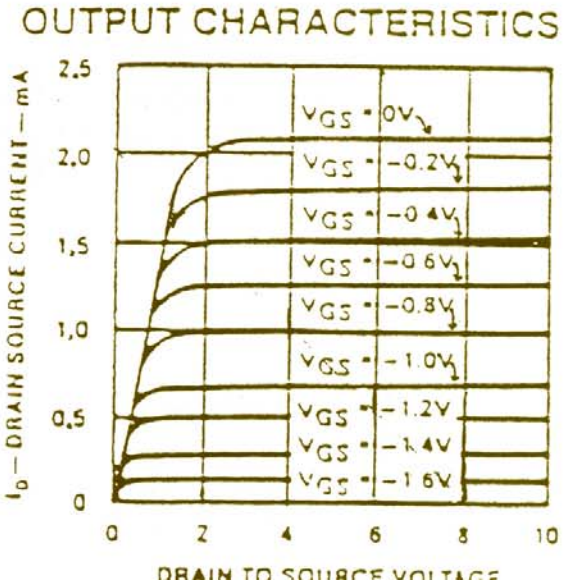




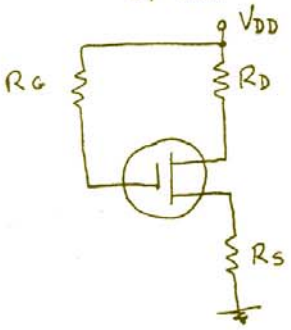
Para el circuito de la figura, determinar:
a) Rs, RG, ID, IG e VDS.
b) Circuito equivalente a diferentes frecuencias.

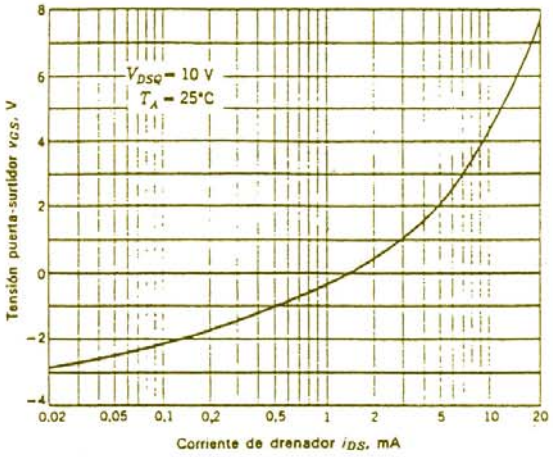






(7) Para el circuito de la figura, determinar:
a) V_{GSQ} e I_{DSQ}.
b) V_{DS}.





DATOS
$R_D = 100\Omega$ $R_S = 727\Omega.$ $R_G = 100K\Omega$ $V_{DD} = 14.54V.$

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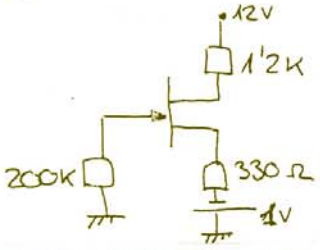
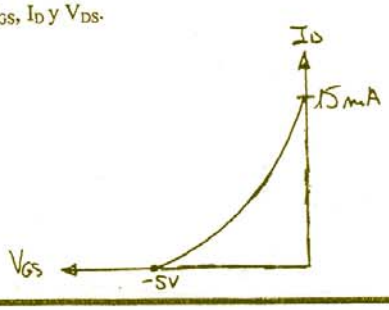
(8) Para el circuito de la figura, determinar V_{GS}, I_D y V_{DS}.





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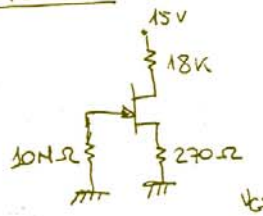
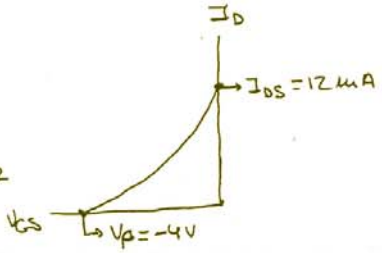
(9) Para el circuito de la figura 4 determinar I_D, V_{GS} y V_{DS}.

FIGURA 4





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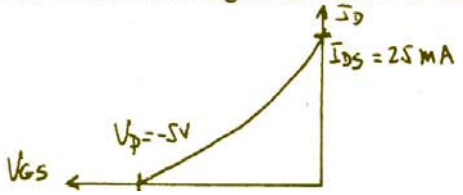
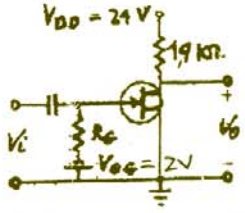
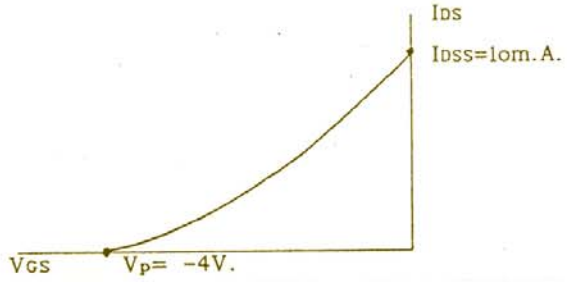
(10) Para el circuito de la figura determinar el valor de V_{DS}:

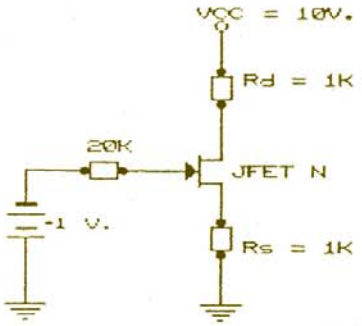




(11)

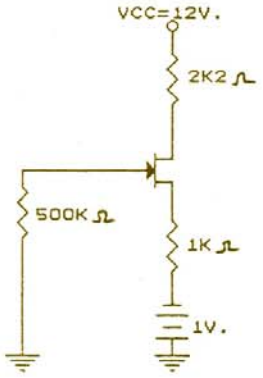
Para el circuito de la figura, determinar V_{GS}, V_{DS} e I_D.

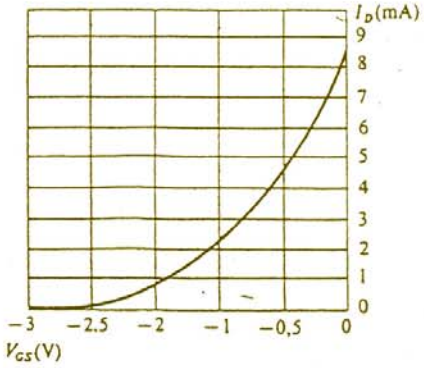




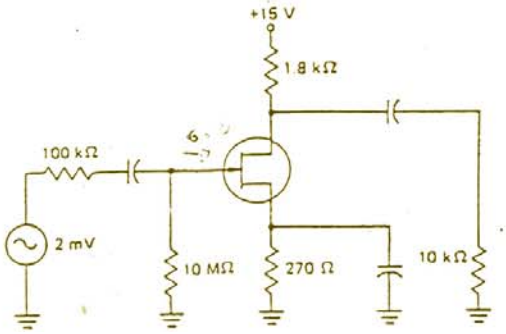
(12) Para el circuito de la figura, determinar:

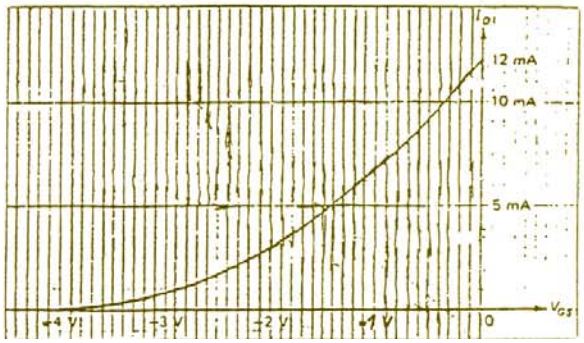
- V_{GSQ} e I_{DSQ}.





(13) Para el circuito de la figura, determinar los valores de I_D e V_{GS}. Repetir los cálculos para R_S = 510 Ω.





14 Para el circuito de la figura, determinar los valores de Vds e Id para el punto de operación.