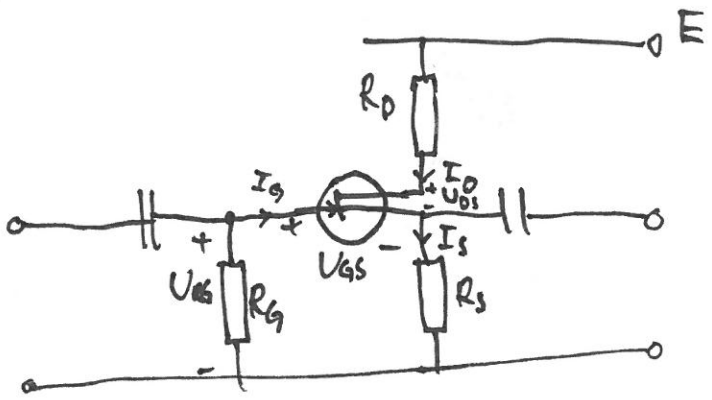
3-24)



$I_D = 2\,mA$
$R_S = 1\,k\Omega$
$R_D = 4\,k\Omega$

$I_G \approx 0 \Rightarrow U_{RG} \approx 0 \;,\; I_S \approx I_D$

KVL:

1: $U_{RG} - U_{GS} - I_D \cdot R_S \Leftrightarrow U_{GS} = -I_D \cdot R_S = -2m \cdot 1k = -2\ V$

2: $-I_D \cdot R_S + E - I_D \cdot R_D - U_{DS} = 0$

$\Rightarrow$

$U_{DS} = E - I_D \cdot (R_S + R_D) = 30 - 2m \cdot 5k = 20\ V$

$$\boxed{\begin{aligned} U_{GS} &= -2\ V \\ U_{DS} &= 20\ V \end{aligned}}$$