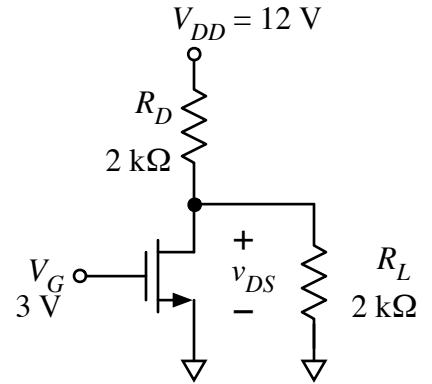Find drain-source voltages for the transistors in the two circuits shown. The NMOS has $V_{Tn} = 1$ V and $K_n = 0.5$ mA/V². For the PMOS, $V_{Tp} = -1$ V and $K_p = 0.222$ mA/V².

$V_{DD} = 12$ V

R_D
2 kΩ

NMOS: $v_{DS} =$ _____

$+$
v_{DS}
$-$

V_G
3 V

R_L
2 kΩ

$V_{DD} = 12$ V

$-$
v_{DS}
$+$

V_G
8 V

R_L
2 kΩ

PMOS: $v_{DS} =$ _____

R_D
2 kΩ

Put your answers — and whatever work will fit — on this sheet. Staple any sheets with additional work behind.