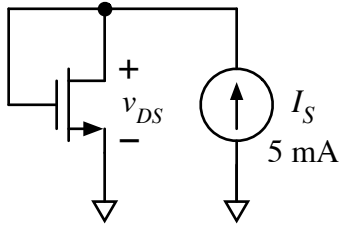
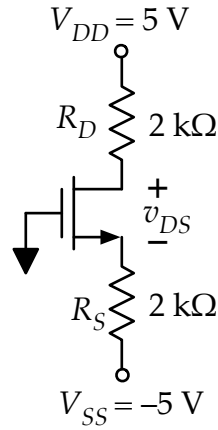


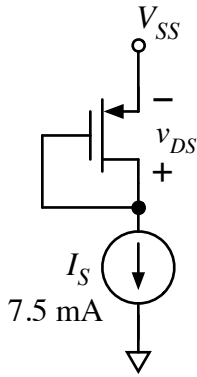
Find  $v_{DS}$  in each of the circuits shown below. The NMOS transistors have  $V_{Tn} = 1\text{ V}$  and  $K_n = 0.5\text{ mA/V}^2$ . The PMOS transistors have  $V_{Tp} = -1\text{ V}$  and  $K_p = 0.25\text{ mA/V}^2$



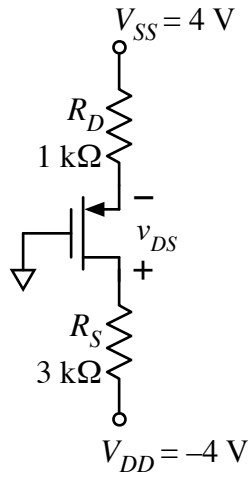
$v_{DS} =$  \_\_\_\_\_



$v_{DS} =$  \_\_\_\_\_



$v_{DS} =$  \_\_\_\_\_



$v_{DS} =$  \_\_\_\_\_