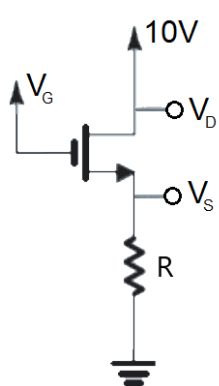


MOSFET circuits with Resistor(s) and DC source.

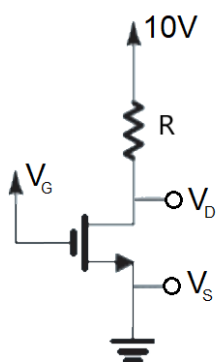
Fill in the blanks in the following table given the four circuit configurations below. Assume $V_T = 1V$ and $k = 1mA/V^2$. In the Mode column enter one of the following:

- “Off” when $V_G < V_T$,
- “Triode” when $V_{DS} < V_{GS} - V_T$ or
- “Saturation” when $V_{DS} \geq V_{GS} - V_T$.

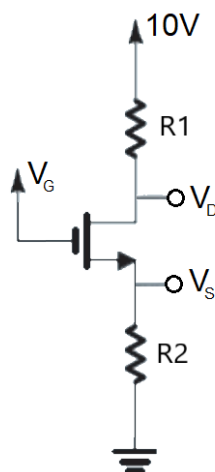
When the MOSFET is in the triode mode put “??” in the I_D column and any column that depends on I_D . When the MOSFET is in off mode, put “??” in the I_D column and any column that depends on I_D .



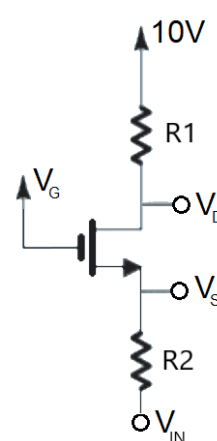
001



002



003



004

Circuit	V_D	V_G	V_S	V_{GS}	V_{OV}	R	I_D	Mode
001		0V				xx		
001		3V				1k		
001		6V				1k		
001		3V				10k		
001		6V				10k		
001		3V				100k		

EENG 385: MOSFET

Circuit	V_D	V_G	V_S	V_{GS}	V_{OV}	R	I_D	Mode
002		0V				x		
002		3V				100 Ω		
002		3V				1k Ω		
002		3V				10k Ω		
002		6V				100 Ω		
002		6V				1k Ω		

Circuit	V_D	V_G	V_S	V_{GS}	V_{OV}	R1	R2	I_D	Mode
003		0V				xx			
003		3V				1k Ω	1k		
003		6V				1k Ω	1k		
003		3V				10k	10k		
003		3V				100k	1k		
003		6V				10k	1k		

Circuit	V_D	V_G	V_S	V_{GS}	V_{OV}	R1	R2	I_D	Mode
004		6V				1k Ω	1k Ω		