


```

\multicolumn{2}{l}{\begin{math}V_{gs} > V_T\end{math} (ON conditions)} \\
\hline
\text{Linear operation \& Saturation operation} \\
\hline
\begin{math}\frac{\partial}{\partial V_{gs}} \left( \frac{\partial I_D}{\partial V_{gs}} \right) = \mu_n C_{ox} \frac{W}{L} V_{ds} \left( \frac{W}{L} \right) \end{math} \&
\begin{math}\frac{\partial I_D}{\partial V_{gs}} = \mu_n C_{ox} \frac{W}{L} (V_{gs} - V_T) \left( 1 + \lambda V_{ds} \right) \end{math} \\
\hline
\begin{tikzpicture}
\begin{axis}
\draw[red] plot[domain=0:10] {1/(3*x)};
\end{axis}
\end{tikzpicture}
\&
\begin{tikzpicture}
\begin{axis}
\draw[blue] plot[domain=0:10] {1/(3*x)};
\end{axis}
\end{tikzpicture} \\
\hline
\begin{tikzpicture}
\begin{axis}
\draw[red] plot[domain=0:10] {3};
\end{axis}
\end{tikzpicture}
\&
\begin{tikzpicture}
\begin{axis}
\draw[blue] plot[domain=0:10] {1/(3*x)};
\end{axis}
\end{tikzpicture} \\
\hline
\end{tabular}
\end{document}

```