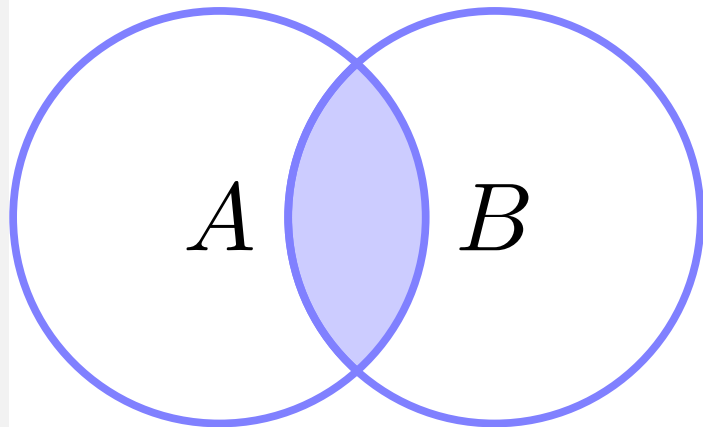


$$A \cap B$$



```
\documentclass[varwidth, border={0pt 0pt 0pt 0
    pt}]{standalone}
\usepackage{tikz}
\begin{document}
\def\firstcircle{(0,0) circle (1.5cm)}
\def\secondcircle{((0:2cm) circle (1.5cm))}
\colorlet{circle edge}{blue!50}
\colorlet{circle area}{blue!20}
\tikzset{filled/.style={fill=circle area, draw=
    circle edge, thick},outline/.style={draw=
    circle edge, thick}}
\begin{tikzpicture}[scale=0.5]
\begin{scope}
\clip \firstcircle;
\fill[filled] \secondcircle;
\end{scope}
\draw[outline] \firstcircle node {$A$};
\draw[outline] \secondcircle node {$B$};
\node[anchor=south] at (current bounding box.
    north) {$A \cap B$};
\end{tikzpicture}
\end{document}
```