Imagine a right circular cone with altitude $H$ and slant height $R$. Let the radius of the circular base be $r$. Imagine that the apex angle of the cone is $\theta$. Now slit the cone open by cutting along the slant height from the base to the apex. Unwrap the slit cone to reveal a circular sector. Find the central angle of this sector, $\alpha$, as a function of $\theta$. 

\[
\begin{align*}
\theta \\
R
\end{align*}
\]