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% !TEX encoding = UTF-8 Unicode
% !TEX program = xelatex
\documentclass{article}
\usepackage{tikz}
\begin{document}
\begin{tikzpicture}[scale=1/2,every node/.style={scale = 4}]
\draw (0, 0) rectangle node {$5^2$} (-5, -5) ;
\draw (0, -5) rectangle node {$5^2$} (5, -10) ;
\draw (0, 0) coordinate (orig) ;
\draw [rotate = -45]
(0, 0) -- ++({sqrt(50)}, 0) rectangle node{$5^2$} +(5, 5) ;
\pgfmathsetmacro\gamma{atan2(5, sqrt(50))}
\draw [rotate = -45 + \gamma]
(0, 0) -- ++({sqrt(75)}, 0) rectangle node{$6^2$} +(6, 6) ;
\pgfmathsetmacro\delta{atan2(6, sqrt(75))}
\draw [rotate = -45 + \gamma + \delta]
(0, 0) rectangle node {$111$} ({sqrt(110)}, {sqrt(110)}) ;
\end{tikzpicture}
\end{document}
```