

$$\begin{aligned}
& \prod_{k=-4}^4 \sqrt{36-k^2} + ik \\
&= (\sqrt{36} + 0k) \cdot \prod_{\substack{k=-4 \\ k \neq 0}}^4 \sqrt{36-k^2} + ik \\
&= 6 \cdot \prod_{k=1}^4 \underbrace{(\sqrt{36-k^2} + ik)(\sqrt{36-k^2} - ik)}_{(36-k^2) - \cancel{ik(36-k^2)} + \cancel{ik(36-k^2)} - \underbrace{i^2 k^2}_{+k^2}} \\
&= 6 \cdot (36-1)(36-2)(36-3)(36-4)
\end{aligned}$$