

$$\begin{aligned}
\vec{V}(d_1) \cdot \vec{V}(d_2) &= \cos(\theta) |\vec{V}(d_1)| |\vec{V}(d_2)| \\
\cos(\theta) &= \frac{\vec{V}(d_1) \cdot \vec{V}(d_2)}{|\vec{V}(d_1)| |\vec{V}(d_2)|} \\
sim(d_1, d_2) &= \frac{\vec{V}(d_1) \cdot \vec{V}(d_2)}{|\vec{V}(d_1)| |\vec{V}(d_2)|}
\end{aligned}$$