

2.02
75

$$\begin{aligned}\frac{\sin(\alpha-\beta)}{\sin(\alpha+\beta)} &= \frac{a^2-b^2}{c^2} \\ &= \frac{(2R\sin\alpha)^2 - (2R\sin\beta)^2}{(2R\sin\gamma)^2} \\ &= \frac{\sin^2\alpha - \sin^2\beta}{\sin^2\gamma} = \frac{(\sin\alpha - \sin\beta)(\sin\alpha + \sin\beta)}{\sin^2(\alpha+\beta)} \\ &= \frac{2\sin\frac{\alpha-\beta}{2} \cos\frac{\alpha+\beta}{2} \cdot 2\sin\frac{\alpha+\beta}{2} \cos\frac{\alpha-\beta}{2}}{\sin^2(\alpha+\beta)} \\ &= \frac{\sin(\alpha-\beta)\sin(\alpha+\beta)}{\sin^2(\alpha+\beta)} \\ \rightarrow &= \frac{\sin(\alpha-\beta)}{\sin(\alpha+\beta)}\end{aligned}$$