

2.52
L8

$$\begin{aligned}\sin(\alpha - \beta) &= \sin^2 \alpha - \sin^2 \beta \\ \sin(\alpha - \beta) &= (\sin \alpha - \sin \beta)(\sin \alpha + \sin \beta) \\ \sin(\alpha - \beta) &= 2 \sin \frac{\alpha - \beta}{2} \cos \frac{\alpha + \beta}{2} \cdot 2 \sin \frac{\alpha + \beta}{2} \cos \frac{\alpha - \beta}{2} \\ \sin(\alpha - \beta) &= \sin(\alpha - \beta) \sin(\alpha + \beta) \\ \sin(\alpha - \beta) [1 - \sin(\alpha + \beta)] &= 0\end{aligned}$$

↓
 $\alpha - \beta = \pi k$
 $k=0$ жағдай
 $\boxed{\alpha = \beta}$
қиғандық

↓
 $1 = \sin(\alpha + \beta)$
 $\alpha + \beta = \frac{\pi}{2} + 2\pi k$
 $k=1$ жағдай
 $\alpha + \beta = \frac{3\pi}{2}$
 $\boxed{\gamma = 90^\circ}$
қиғандық