

2.53
e7

$$\sin \gamma \stackrel{?}{=} \sin(\alpha + \beta) - 2 \cos(\beta + \gamma) \sin(\alpha + \gamma)$$

$$\gamma = 180 - \alpha - \beta$$

$$\sin(\alpha + \beta) \stackrel{?}{=} \sin(\alpha + \beta) - 2 \cos(180 - \alpha) \sin(180 - \beta)$$

$$\sin(\alpha + \beta) \stackrel{?}{=} \sin(\alpha + \beta) + 2 \cos \alpha \sin \beta$$

$$\sin(\alpha + \beta) \stackrel{?}{=} \sin \alpha \cos \beta + \cos \alpha \sin \beta + 2 \cos \alpha \sin \beta$$

$$\sin(\alpha + \beta) = \sin \alpha \cos \beta + \cos \alpha \sin \beta$$