

2. Given that $(\sin \theta + \cos \theta) \neq 0$, find all the solutions of

$$\frac{2 \cos 2\theta(\sin 2\theta - \sqrt{3} \cos 2\theta)}{\sin \theta + \cos \theta} = \sqrt{6}(\sin 2\theta - \sqrt{3} \cos 2\theta)$$

for $0 \leq \theta < 360^\circ$.

(10)