

9 (a) For $\cos \theta \neq 0$, prove that

$$\operatorname{cosec} 2\theta + \cot 2\theta = \cot \theta$$

[4 marks]

9 (b) Explain why

$$\cot \theta \neq \operatorname{cosec} 2\theta + \cot 2\theta$$

when $\cos \theta = 0$

[1 mark]

