

Advanced Higher Maths
SQA 2016 Exemplar
Question 5



Given that $z = 1 - \sqrt{3}i$, write down the conjugate \bar{z} and express \bar{z}^2 in polar form.

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Answer:

$$1 + \sqrt{3}i$$

$$\bar{z}^2 = 4 \left(\cos \frac{2\pi}{3} + i \sin \frac{2\pi}{3} \right)$$