

Answer on Question #58297 – Math – Complex Analysis
Question

If

$$z = -1 - i\sqrt{3}$$

$$z = -1 - 3i,$$

find $|z|$.

Solution

$$\text{If } z = -1 - i\sqrt{3} \text{ then } |z| = |-1 - i\sqrt{3}| = \sqrt{(-1)^2 + (-\sqrt{3})^2} = \sqrt{4} = 2.$$

$$\text{If } z = -1 - i \cdot 3 \text{ then } |z| = |-1 - 3i| = \sqrt{(-1)^2 + (-3)^2} = \sqrt{10}.$$

Answer: $2; \sqrt{10}$.