

Answer on Question #58298 – Math – Complex Analysis

Question

Let

$$z = -3 + i\sqrt{7}$$

$$z = -3 + i7,$$

then

$$\tan\theta =$$

Solution

$$z = x + iy = -3 + \sqrt{7}i \rightarrow \tan\theta = \frac{y}{x} = \frac{\sqrt{7}}{-3} = -\frac{\sqrt{7}}{3};$$

$$z = x + iy = -3 + 7i \rightarrow \tan\theta = \frac{y}{x} = \frac{7}{-3} = -\frac{7}{3}.$$

$$\text{Answer: } -\frac{\sqrt{7}}{3}; -\frac{7}{3}.$$