

Zadatak 48. Prikaži u trigonometrijskom obliku broj $z = 1 + i \operatorname{tg} \alpha$.

Rješenje. $z = \frac{1}{\cos \alpha} (\cos(\alpha + 2k\pi) + i \sin(\alpha + 2k\pi))$, ako je $-\frac{\pi}{2} + 2n\pi < \alpha < \frac{\pi}{2} + 2n\pi$, te $z = \frac{1}{|\cos \alpha|} (\cos(\alpha + \pi + 2k\pi) + i \sin(\alpha + \pi + 2k\pi))$, ako je $\frac{\pi}{2} + 2n\pi < \alpha < \frac{3\pi}{2} + 2n\pi$, $k, n \in \mathbf{Z}$.