

Opti 501

Solutions

Problem 26) The angle β is the complement of θ_B' , that is, $\beta + \theta_B' = 90^\circ$. But $\theta_B + \theta_B' = 90^\circ$; therefore, $\beta = \theta_B$. Since the sum of the three angles of a triangle is equal to 180° , we have $\beta + \beta + \alpha = 180^\circ$. From here we find: $\alpha = 180^\circ - 2\beta = 180^\circ - 2 \tan^{-1} n_o$.

