

1. Consider the quadratic system $\begin{cases} (x - 10)^2 + (y - 2)^2 = 125 \\ y = 2x + b \end{cases}$. Find all values of b for which this system has exactly one real solution.
2. An angle α is such that three times α is co-terminal with 60° . Then α must be co-terminal with what angle?