



$$\begin{aligned}y^2 + (8 - x)^2 &= 121 \\y^2 + x^2 &= 81 \\64 - 16x &= 40 \\x &= 1.5\end{aligned}$$

Left lower angle = $\arccos(6.5/11) = 53.7784^\circ$
 Right lower angle = $\arccos(1.5/9) = 80.4059^\circ$
 Top angle = $180 - 53.7784 - 80.4059 = 45.8157^\circ$

y'

