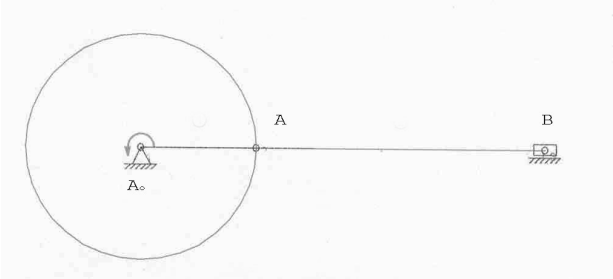
Exercise 1.12:



Analysis of the acceleration of a slider crank using the PC-Program SAM 6.0
Create the crank-and-rocker with the given coordinates. A_o (0/0) A (100/0) B (350/0) Use the **Input motion**: Motion 360 [deg] Time 0.01 [s] Intervals 36 [-] For the given **n = 6000 rpm, n = 100 s^{-1}** , the time T = 1/n = 0.01 s) Now calculate with the **Abacus** icon, **Node Data** click on point B **X-direction** √ **Acceleration** and animate the mechanism using the **Windmill** icon. Look at the **Graph of Selected items.** Find the maximum point and the value of the velocity $\lvert a_{B,max} \rvert$ in [m/s²] .