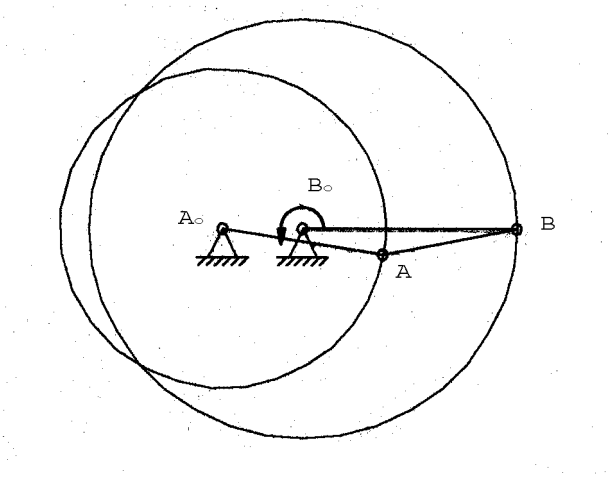
Exercise 1.9:



a) Graphic analysis of a double crank	b) Analysis using the PC-Program SAM 6.0
Please make a sketch on a sheet of paper (DIN A4) with the given coordinates: A_o (0/0) A (60/-10) B (110/0) B_o (30/0) Start in the given position and show the positions of the mechanism at 45 degree steps. Discuss the movement of the coupler AB.	Create the double crank with the given coordinates (s. left). Use the **Input motion**: Motion 360 [deg] Time 0.1 [s] Intervals 36 [-] For the given **n = 10 s^{-1}** , the time T = 1/n = 0.1 s) Now calculate with the **Abacus** icon, N**ode Data** click to points A **Absolute:** √ **Velocity** and let the mechanism move by using the **Windmill** icon. Show the coupler curve of the points A by using: **Display** and **Path**. Then show the Hodograph by using: **Display** and **Hodograph.** Look at the **Graph of Selected items.** Find the maximum point of velocity and the value of $\lvert v_{A,abs} \rvert$ in [m/s] . Discuss the movement of the coupler.