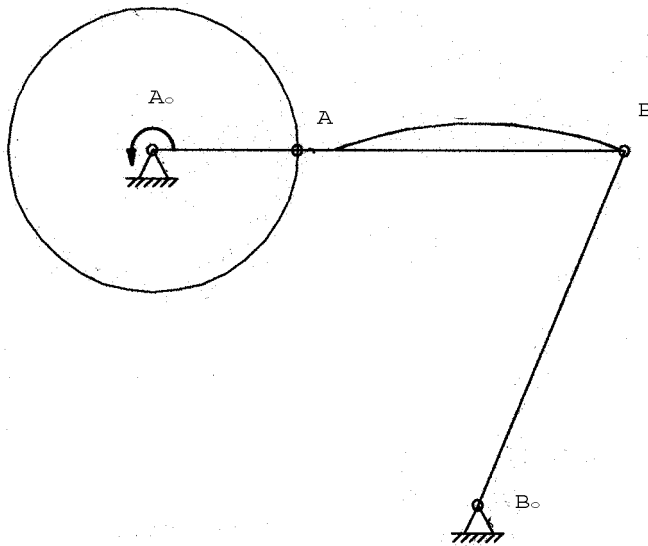


Exercise 1.11:



Analysis of the velocities of a crank-and-rocker using the PC-Program SAM 6.0

Create the crank-and-rocker with the given coordinates.

A_0 (0/0)

A (40/0)

B (130/0)

B_0 (90/-100)

Use the **Input motion**:

Motion 360 [deg]

Time 0.25 [s]

Intervals 36 [-]

For the given $n = 4 \text{ s}^{-1}$, the time $T = 1/n = 0.25 \text{ s}$

Now calculate with the **Abacus** icon, **Node Data** click on points B **Absolute:** $\sqrt{\text{Velocity}}$

and animate the mechanism using the **Windmill** icon. Show the

coupler curve of the point B using: **Display** and **Path**. Then show the

Hodograph using: **Display** and **Hodograph**.

Look at the **Graph of Selected items**.

Find the maximum point of velocity and the value of $|v_{B,\max}|$ in [m/s].