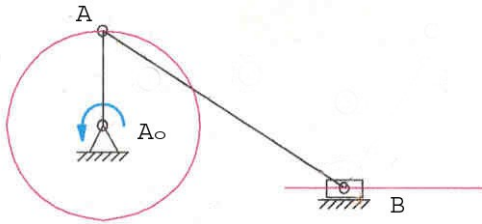


Exercise 1.8:



Analysis of the acceleration of a slider crank using PC-Program SAM 6.0

Create the slider crank with the given coordinates in mm:

$A_0(0/0)$ ,  $A(0/30)$ ,  $B(75/-20)$

Given:  $n = 10 \text{ s}^{-1}$  ( $n = 600 \text{ rpm}$ ); (Time  $T$  for one revolution:  $T = 1/n = 0.1 \text{ s}$ )

**Input motion:**

Motion 360 [deg]

Time 0.1 [s]

Intervals 36 [-]

**Abacus**

**Node Data**, click on joint B

**Absolute:**  **Velocity**  **Acceleration**

Look at the **Graph of Selected items**

Find the maximum point of acceleration.

What is the Result of  $| a_{B,abs} |$  in  $[\text{m/s}^2]$  ?