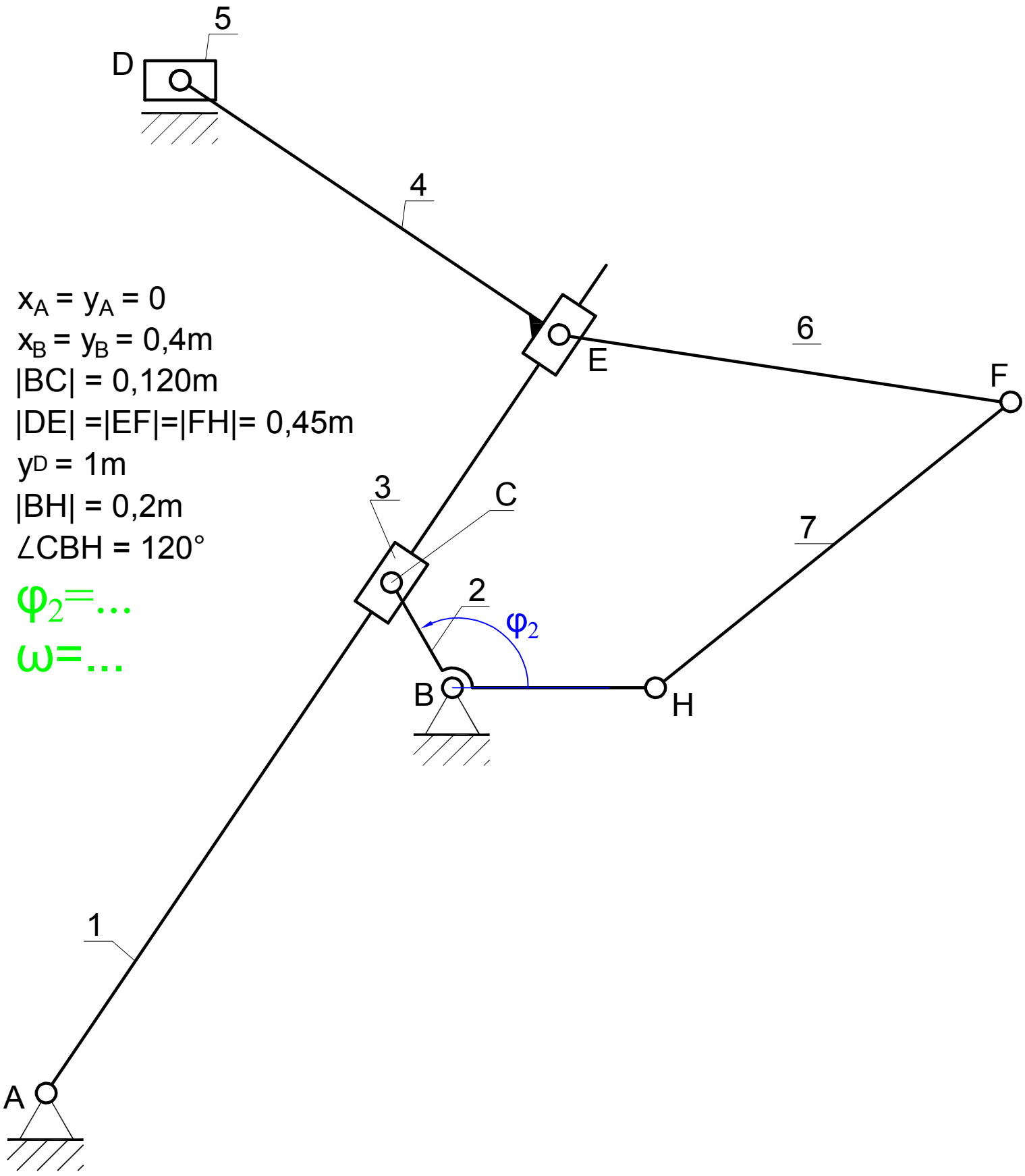


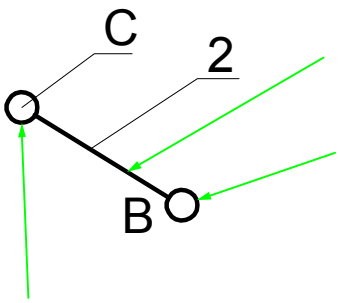
$x_A = y_A = 0$
$x_B = y_B = 0{,}4m$
$|BC| = 0{,}120m$
$|DE| = |EF| = |FH| = 0{,}45m$
$y_D = 1m$
$|BH| = 0{,}2m$
$\angle CBH = 120°$

$\varphi_2 = \ldots$

$\omega = \ldots$

Before starting modeling of the mechanism set the units:
F4 Unit and dimension settings ... select Unit system -> SI (degree)

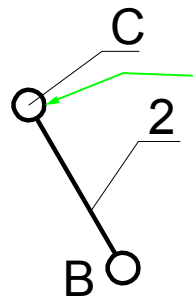
PART I : LINKS 1,2,3



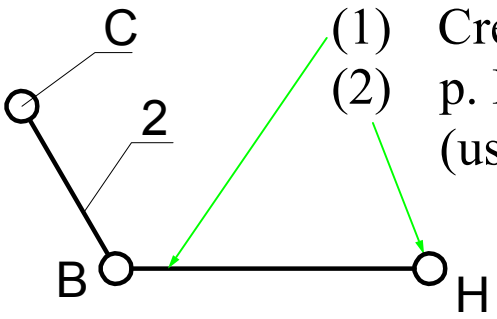
(1) Create element Beam (from Build) (link 2),

(2) p. B: (Spacebar or Keyboard entry) Node properties - Carthesian absolute (use coord. x_B i y_B)

(3) Chose any position of p.C



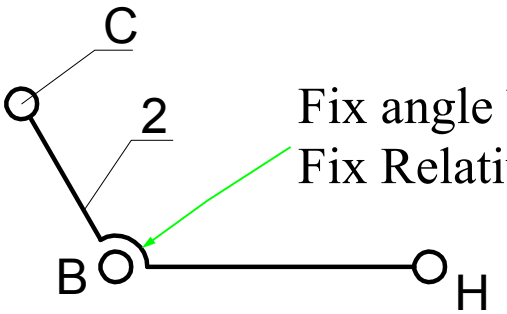
p.C: (from Build) Node properties - Polar relative (use lengh BC, φ_2 angle and relate to node - p. B)



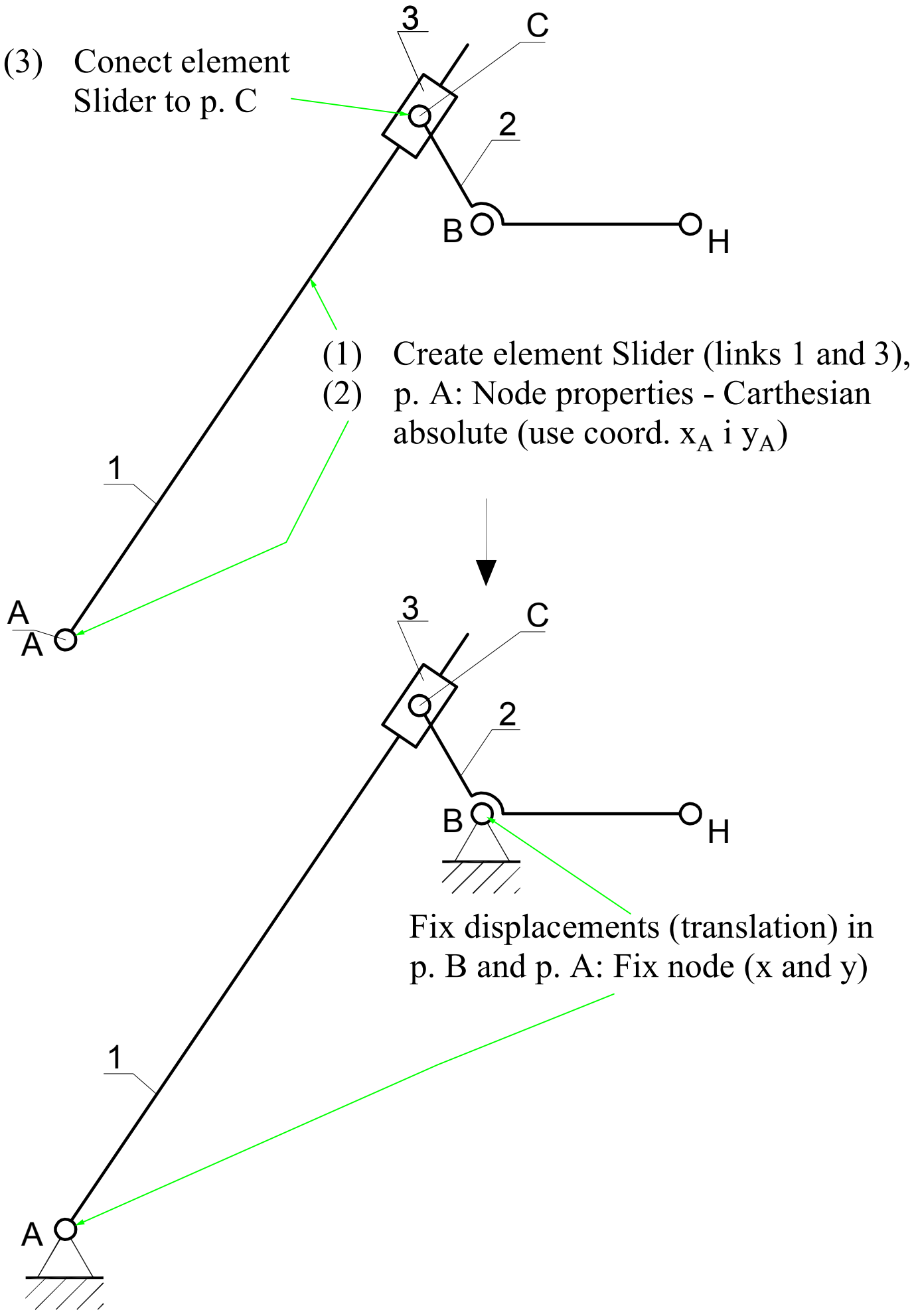
(1) Create new element Beam - start in node p.B,

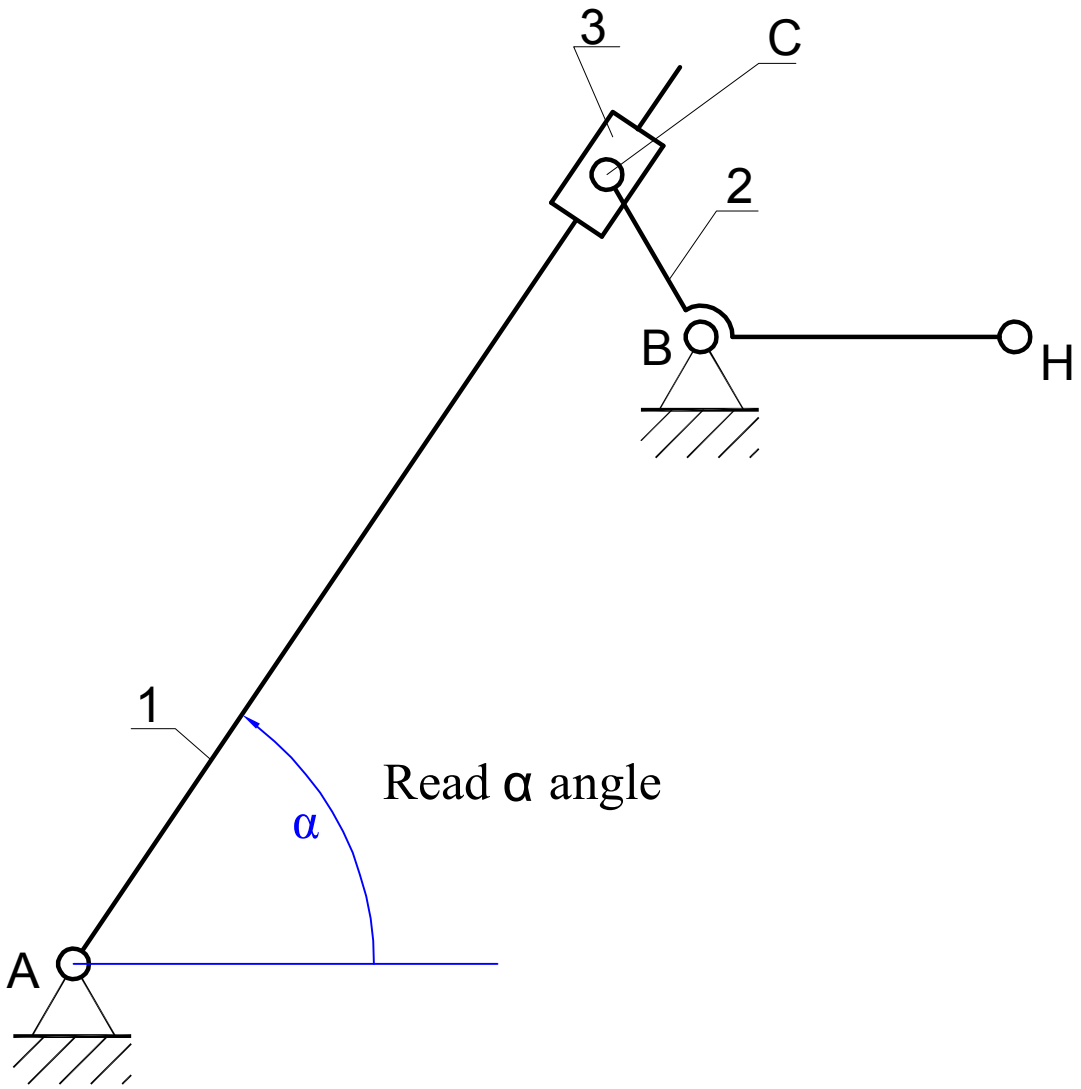
(2) p. H - Node properties - Polar relative (use lengh BH, β angle, relative to node p.B)

$\beta=\varphi_2-120^o$



Fix angle between elements:
Fix Relative Angle (select both Beam elements)


(3) Conect element
Slider to p. C
3
C
2
B
H
(1) Create element Slider (links 1 and 3),
(2) p. A: Node properties - Carthesian
absolute (use coord. x_A i y_A)
1
A
A
3
C
2
B
H
Fix displacements (translation) in
p. B and p. A: Fix node (x and y)
1
A



(1) Define angular drive (Input Motion - Angle): keyboard entry (spacebar) enter node's and element's number corresponding to p. B and link 2, enter parameters: Motion = 360, Time = from equation $2\pi/\omega$, Intervals = 3600, then ADD and OK)

(2) Display the angular velocity run on the graph (Results->Select, select element Slider (link 1), chose Angular velocity <AV>)

(3) Create angular acceleration plot of link 1 (Angular acceleration <AA>)

(4) Read the maximum value for both parameters