## User study: model 3

## Allotted time: 15min\*\*

## Task 1:

Please add constraints and parametric behavior to the model to ensure the model behaves as specified when the variable dimension(s) take any value between the specified bounds

Variable dimension(s):

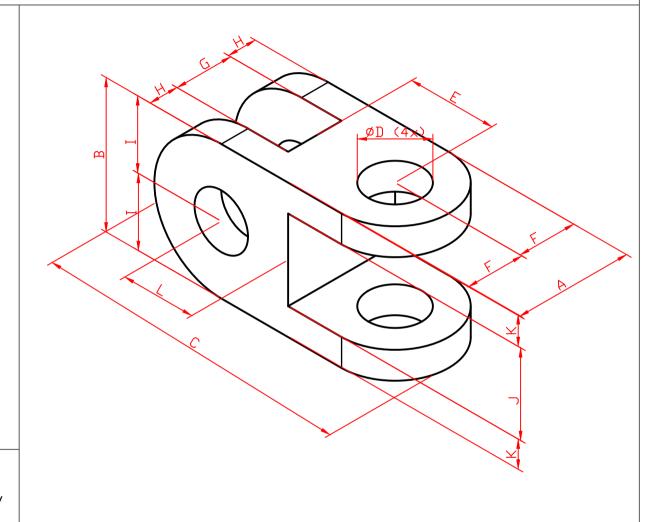
- 1. A is a value that can change between 30mm and 60mm\*
- 2. C is a value that can change between 60mm and 120mm\*

Specifications:

- 1. B = A
- 2.  $D = \frac{1}{2} A$
- 3.  $E = L = \frac{1}{3}C$
- 4.  $G = \frac{1}{2}A$
- 5.  $J = \frac{1}{2} B$
- 6. All edges that are horizontal should remain horizontal at any valid value of A and C
- 7. All edges that are vertical should remain vertical at any valid value of A and C
- 8. All angles should remain the same at any value of A and C

## Task 2:

Please ensure the resulting model (i.e. all the sketches) are fully defined.



Although it is not necessary to delete constraints and/or dimensions that are currently present in the model, you are allowed to do so if desired.

\*You **do not** have to enforce these limits on the design, but you have to ensure the model behaves as specified within these bounds

\*\* You are given 10 minutes to complete this task. If the allotted time elapses before you finished the task, you will be automatically moved to the next task.