



LOCI of a CAM

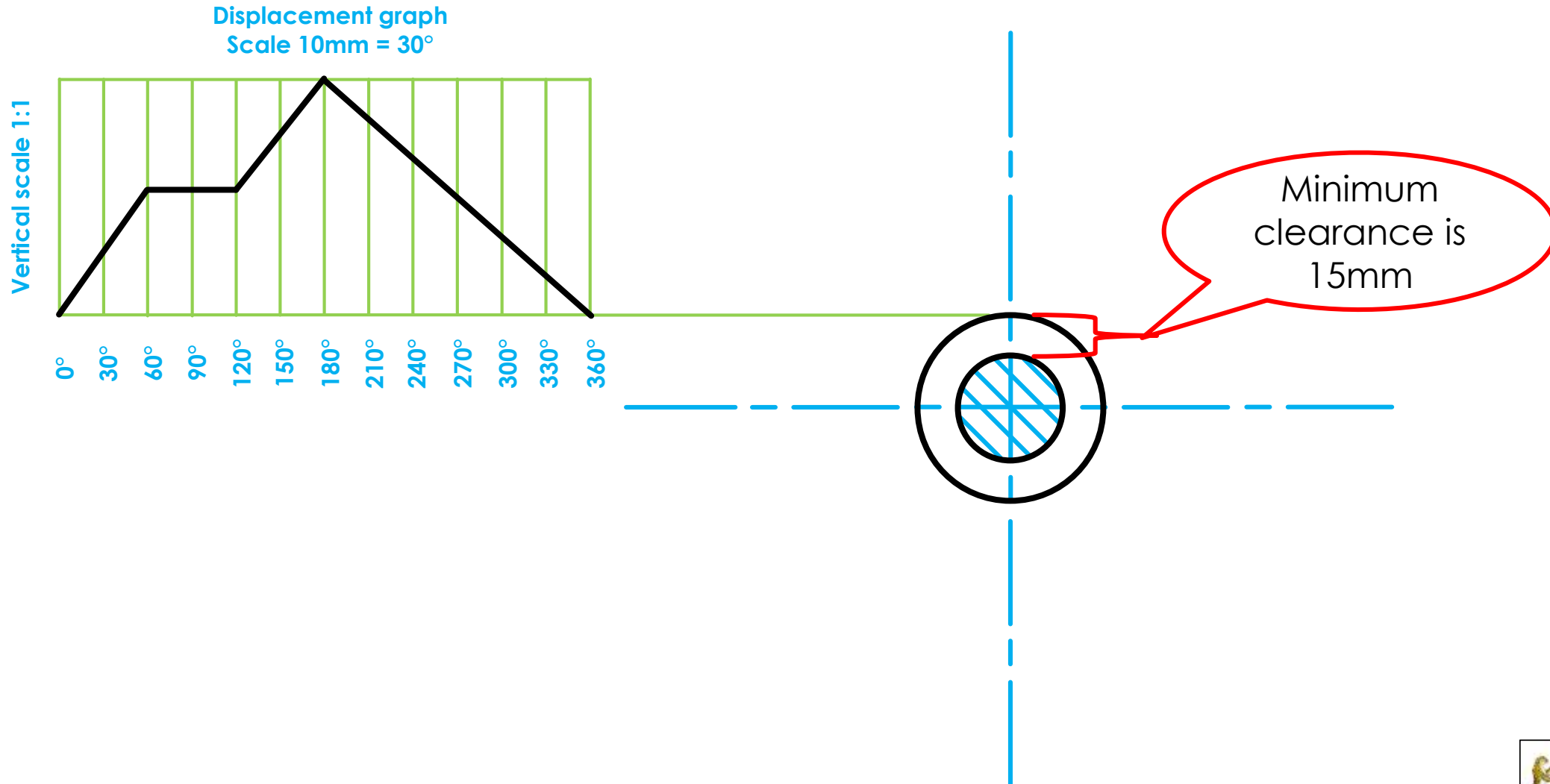
Grade 11 & 12

Developed by: PC Viljoen
Senior Educational Specialist for
Engineering Graphics and Design
Free State Province

Loci of a CAM: General information

- After the displacement graph is developed?
 - Allow for the **minimum clearance** on the cam plate

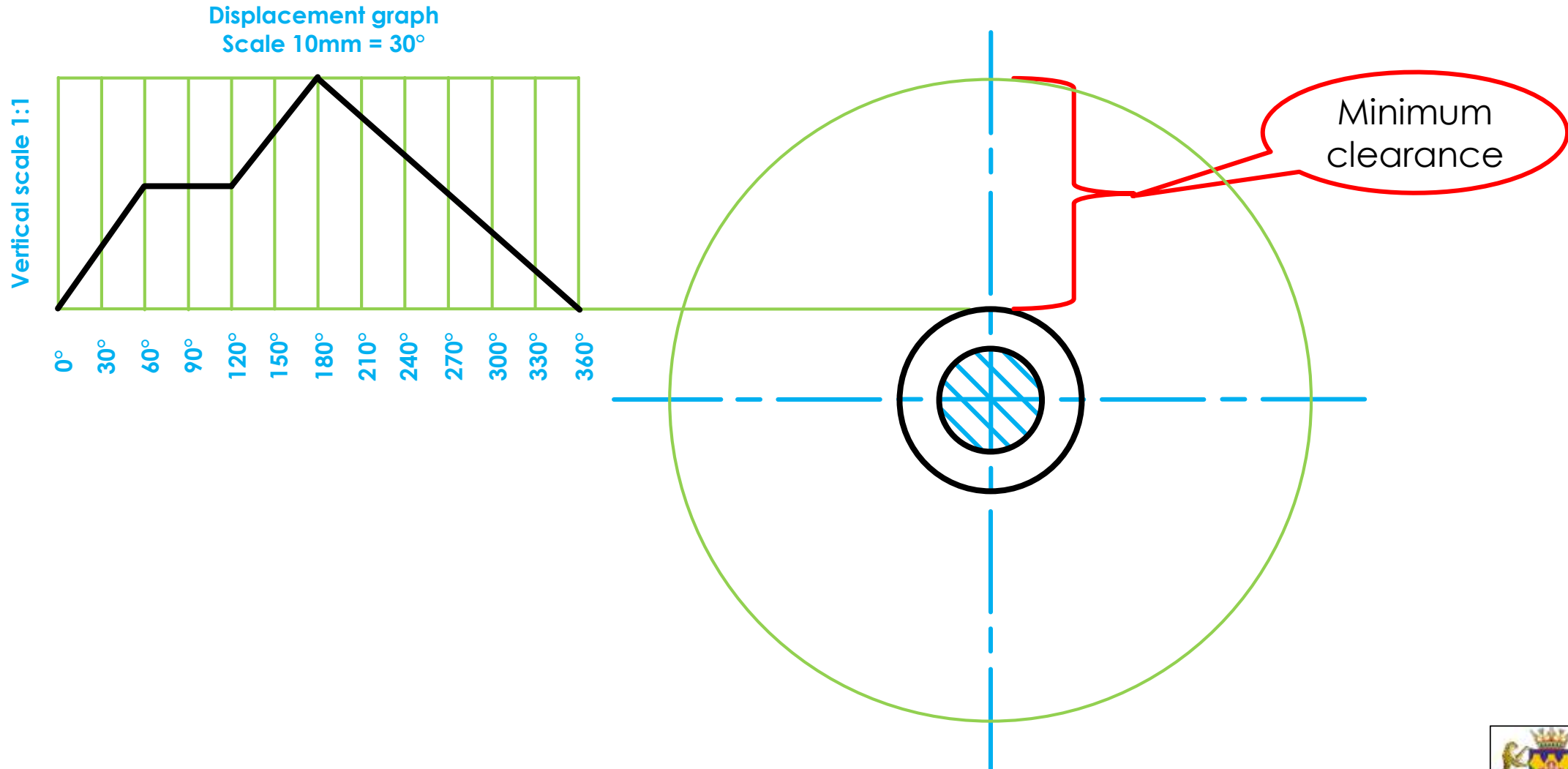
Loci of a CAM: General information



Loci of a CAM: General information

- After the displacement graph is developed?
 - Allow for the **maximum clearance** on the cam plate

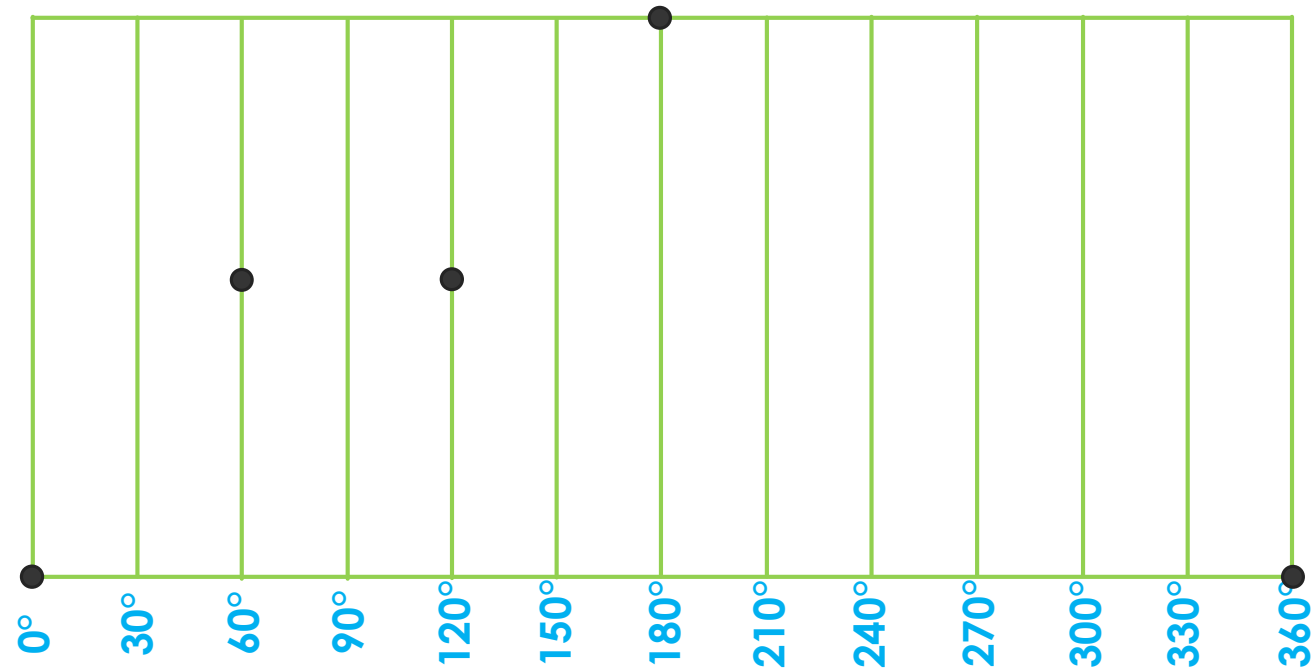
Loci of a CAM: General information



Loci of a CAM

By means of uniform motion

- 0° - 60° : Rise for 50%
- 60° - 120° : Rest
- 120° - 180° : Rise to maximum
- 180° - 360° : Back to original position



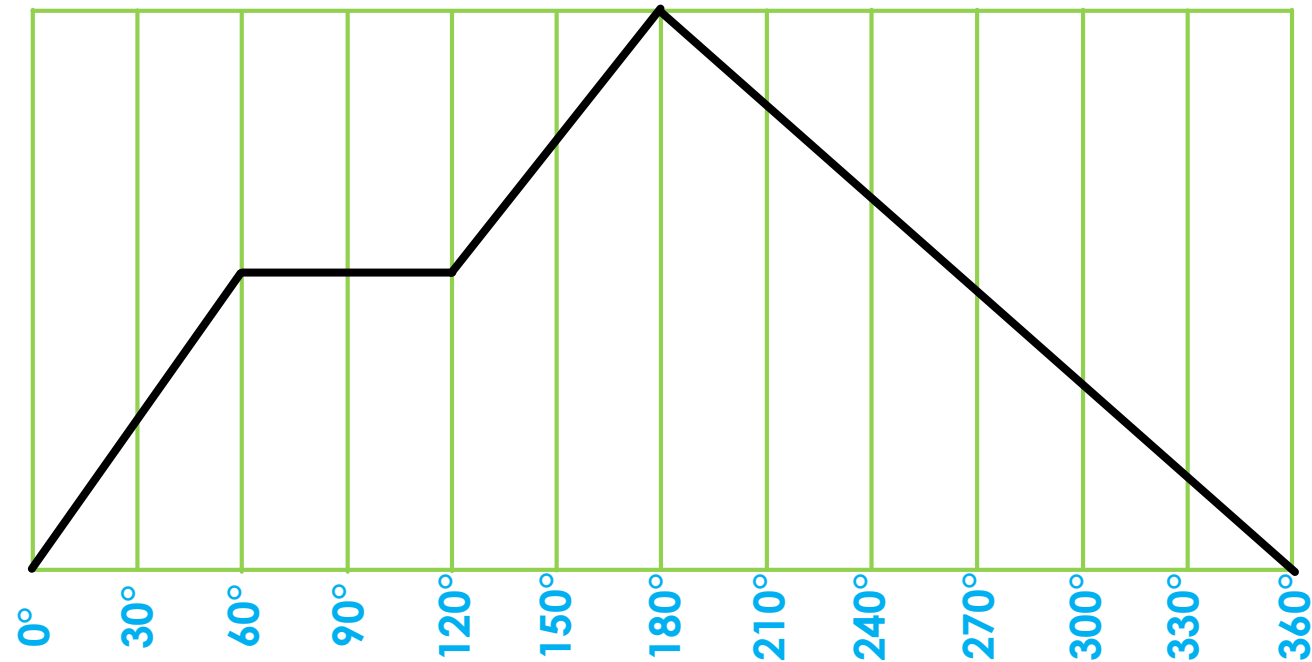
Displacement graph
Scale 10mm = 30°

Vertical scale 1:1

Loci of a CAM

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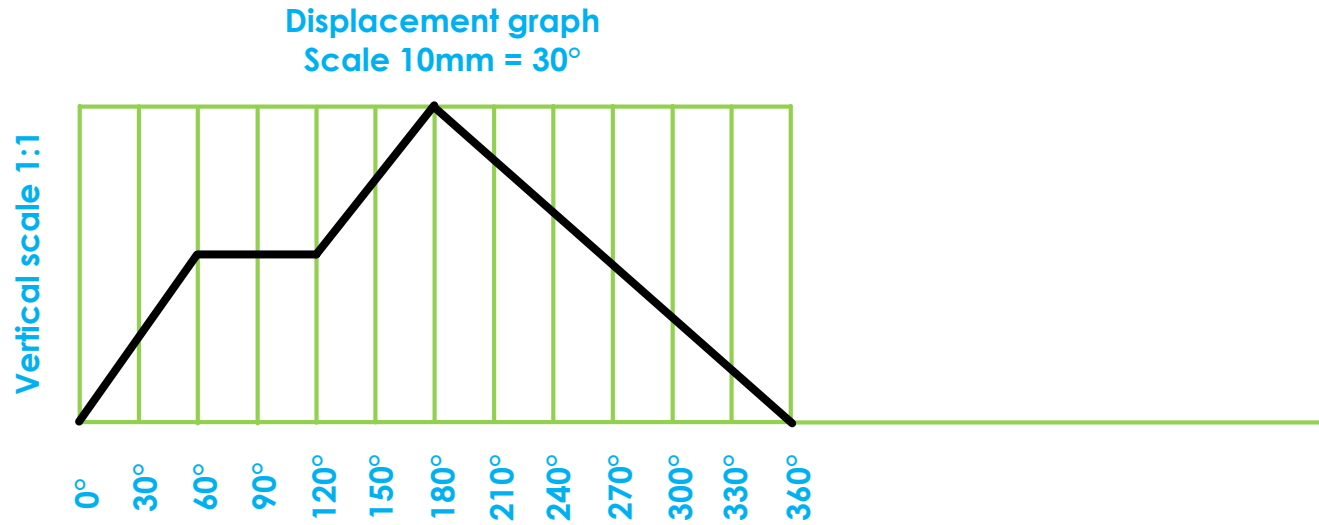
Vertical scale 1:1

Displacement graph
Scale 10mm = 30°

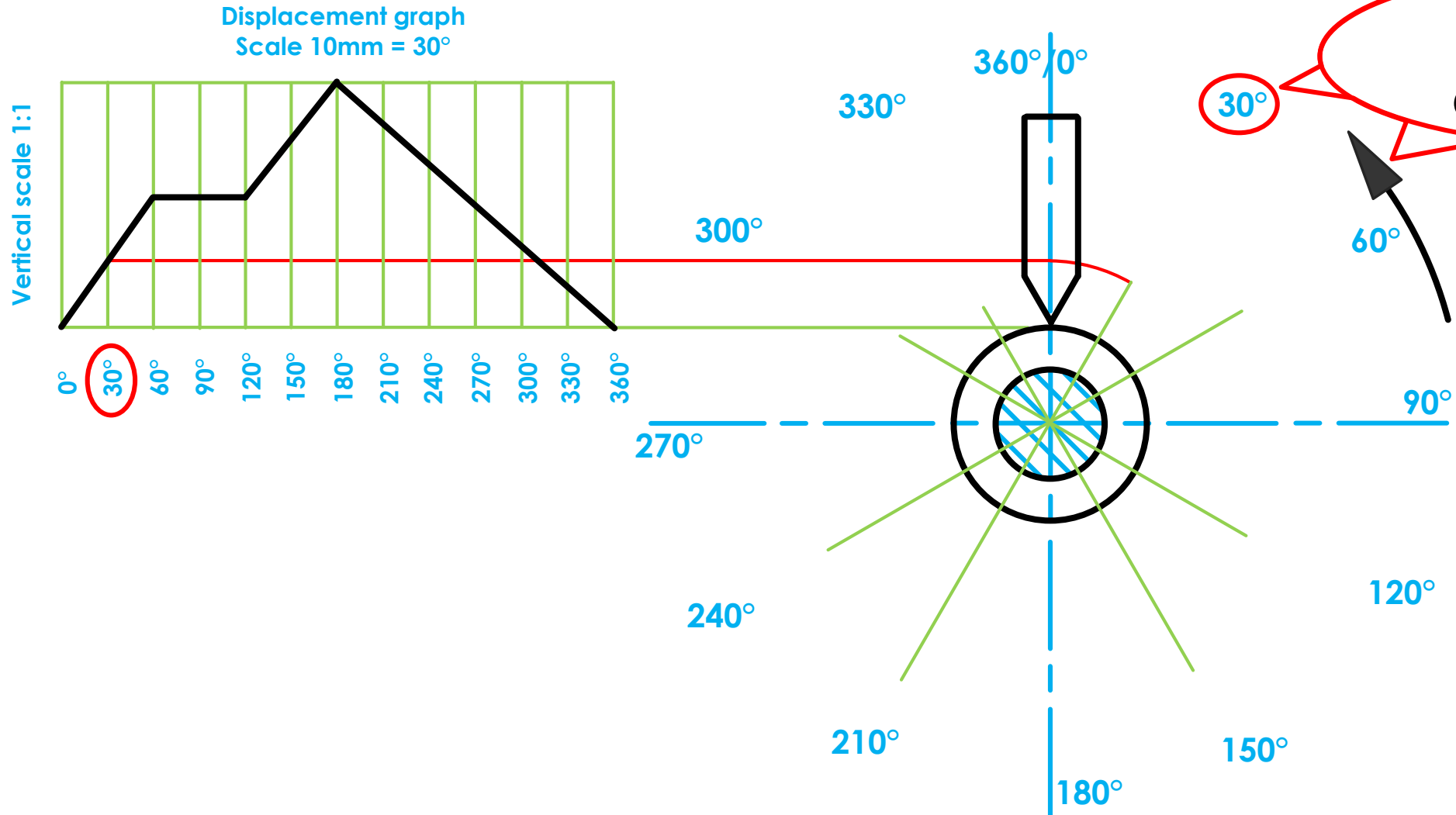
Loci of a CAM

- Transfer the information on the displacement graph to the cam plate once the displacement graph is developed

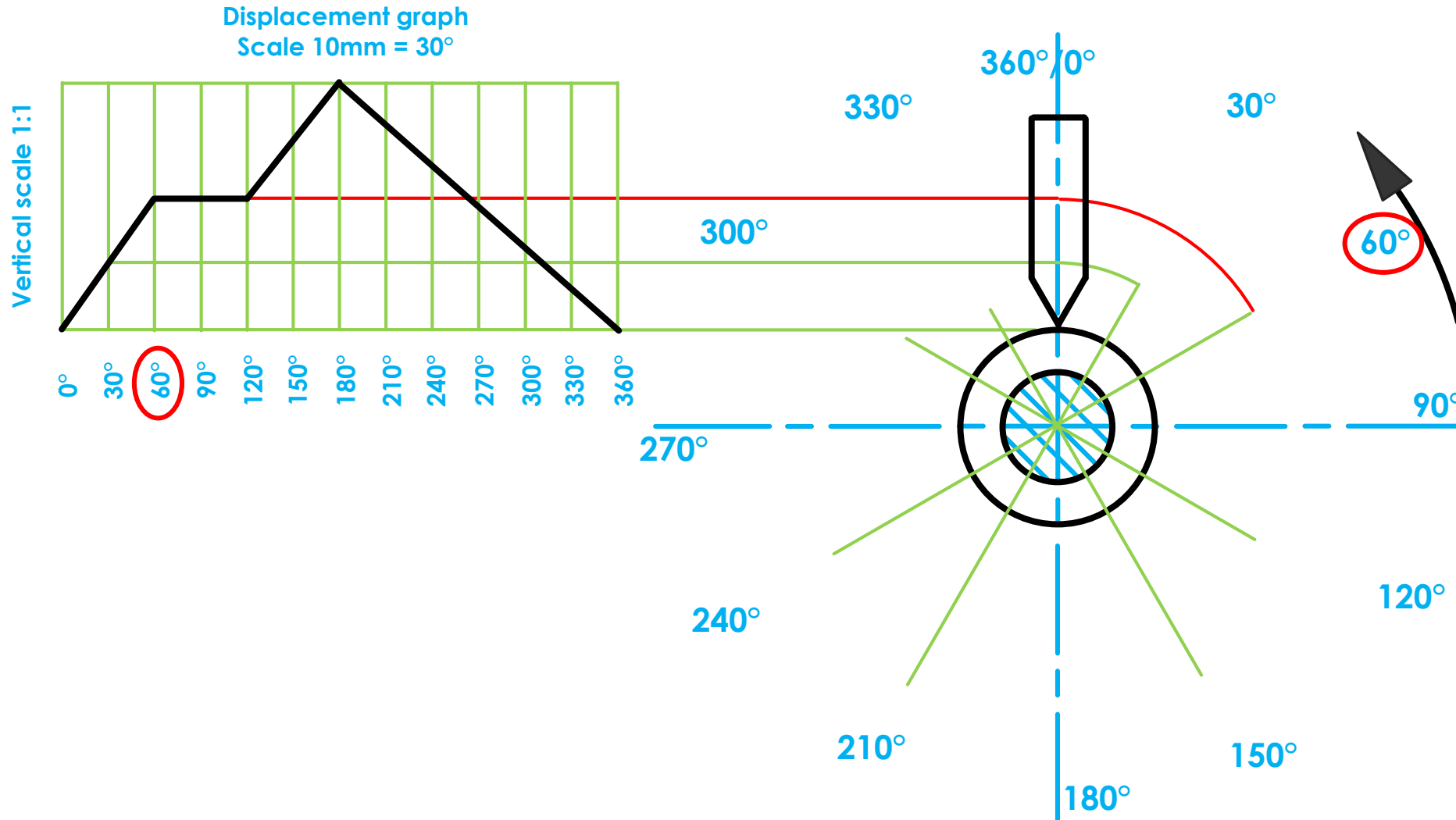
Loci of a CAM



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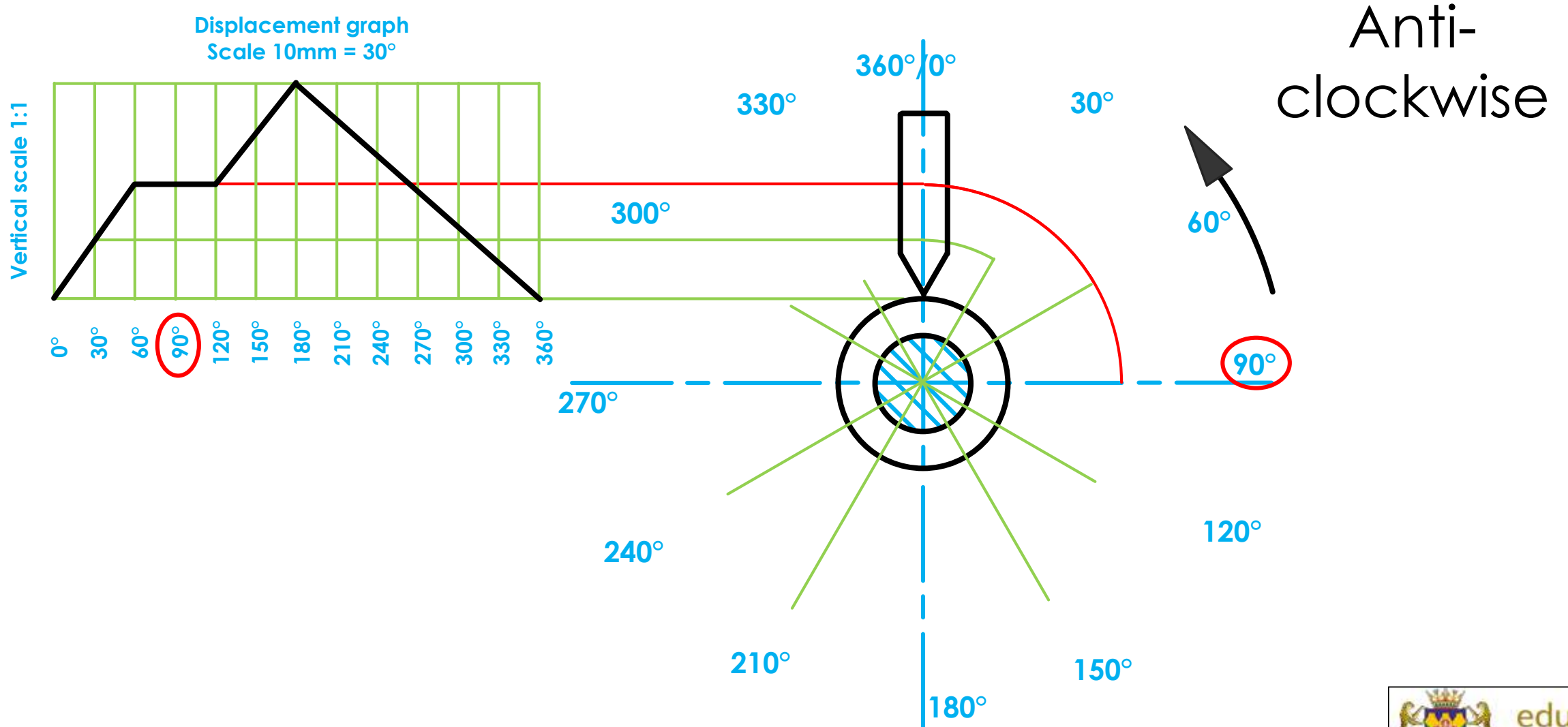


Loci of a CAM

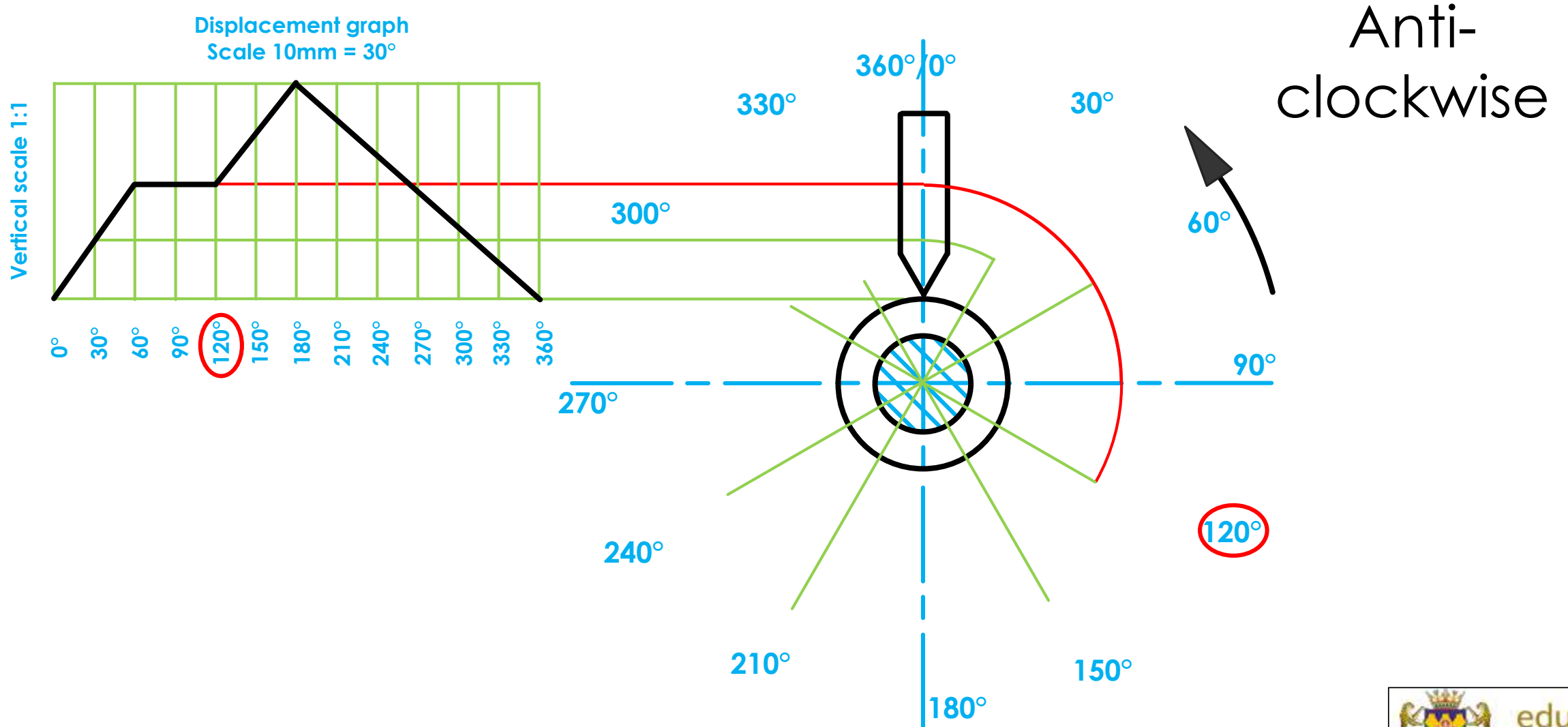


Anti-clockwise

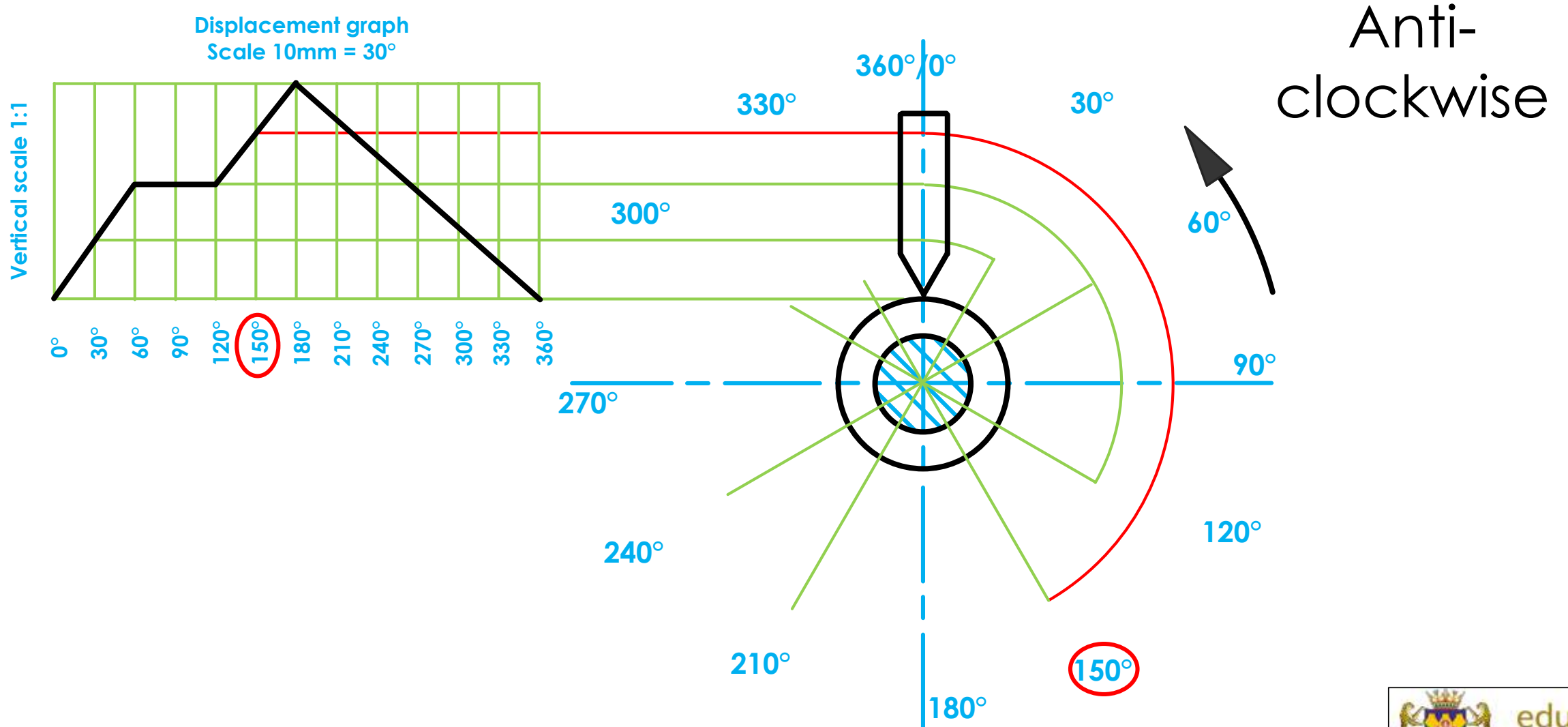
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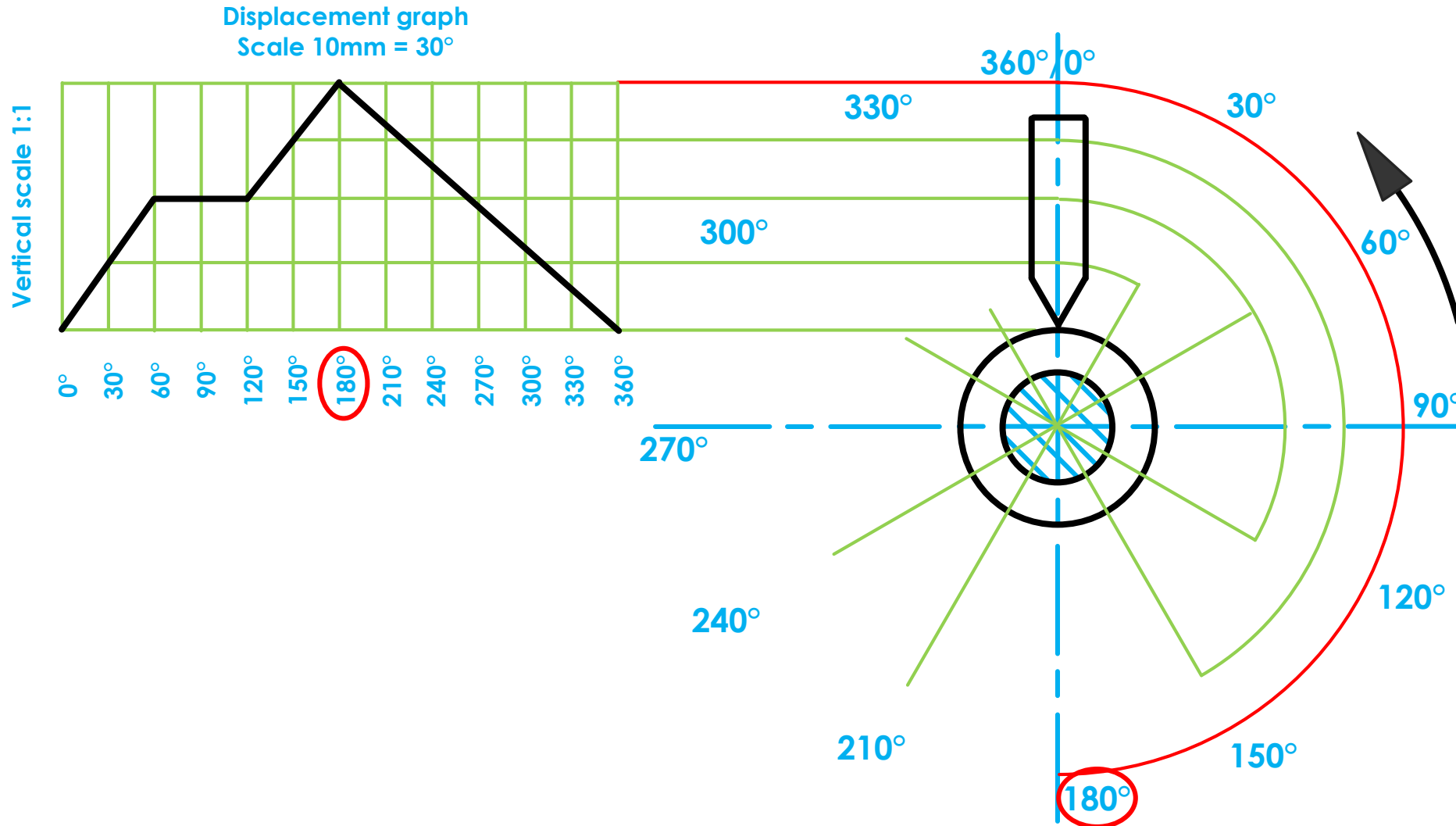
Loci of a CAM



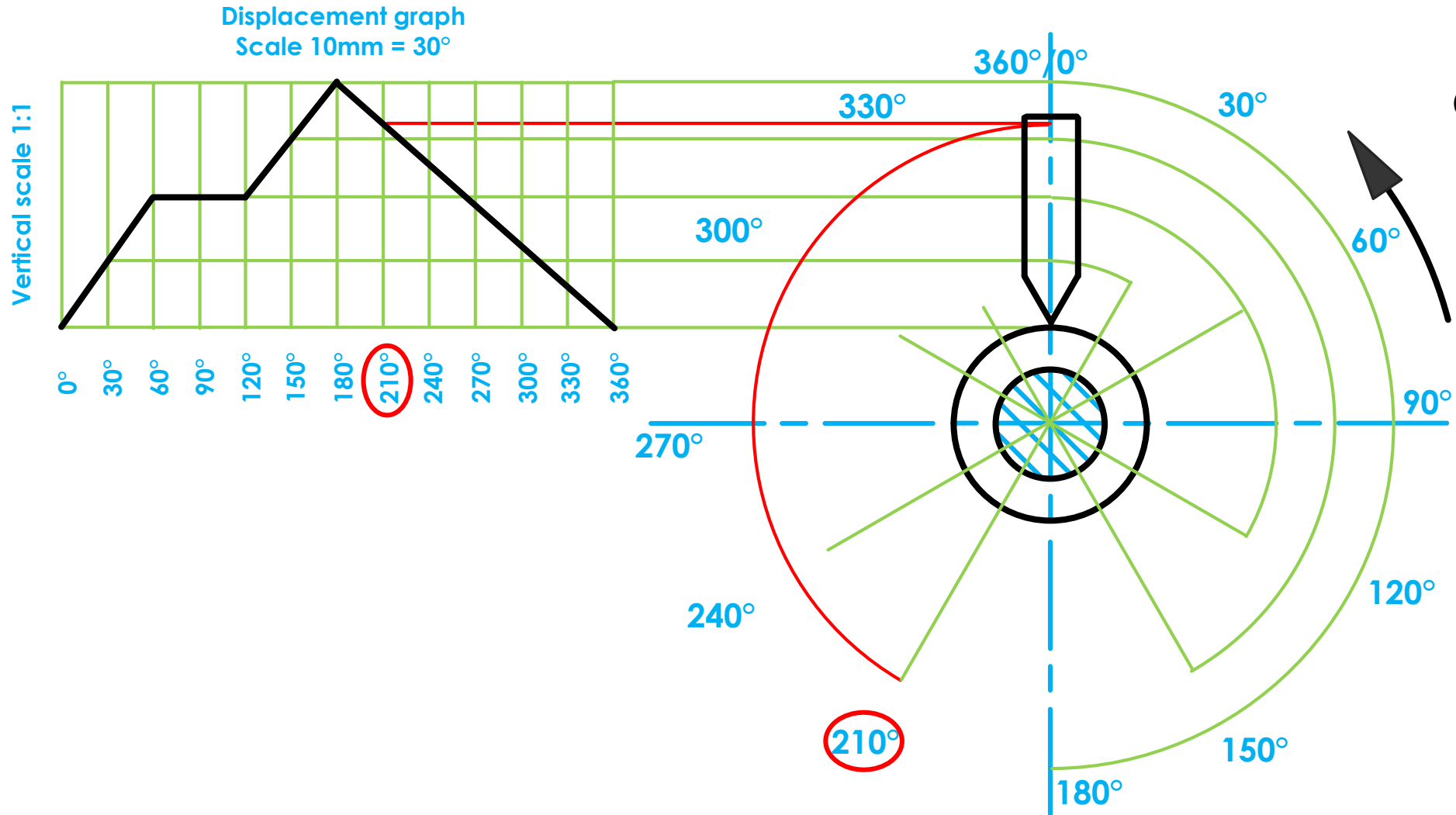
Loci of a CAM



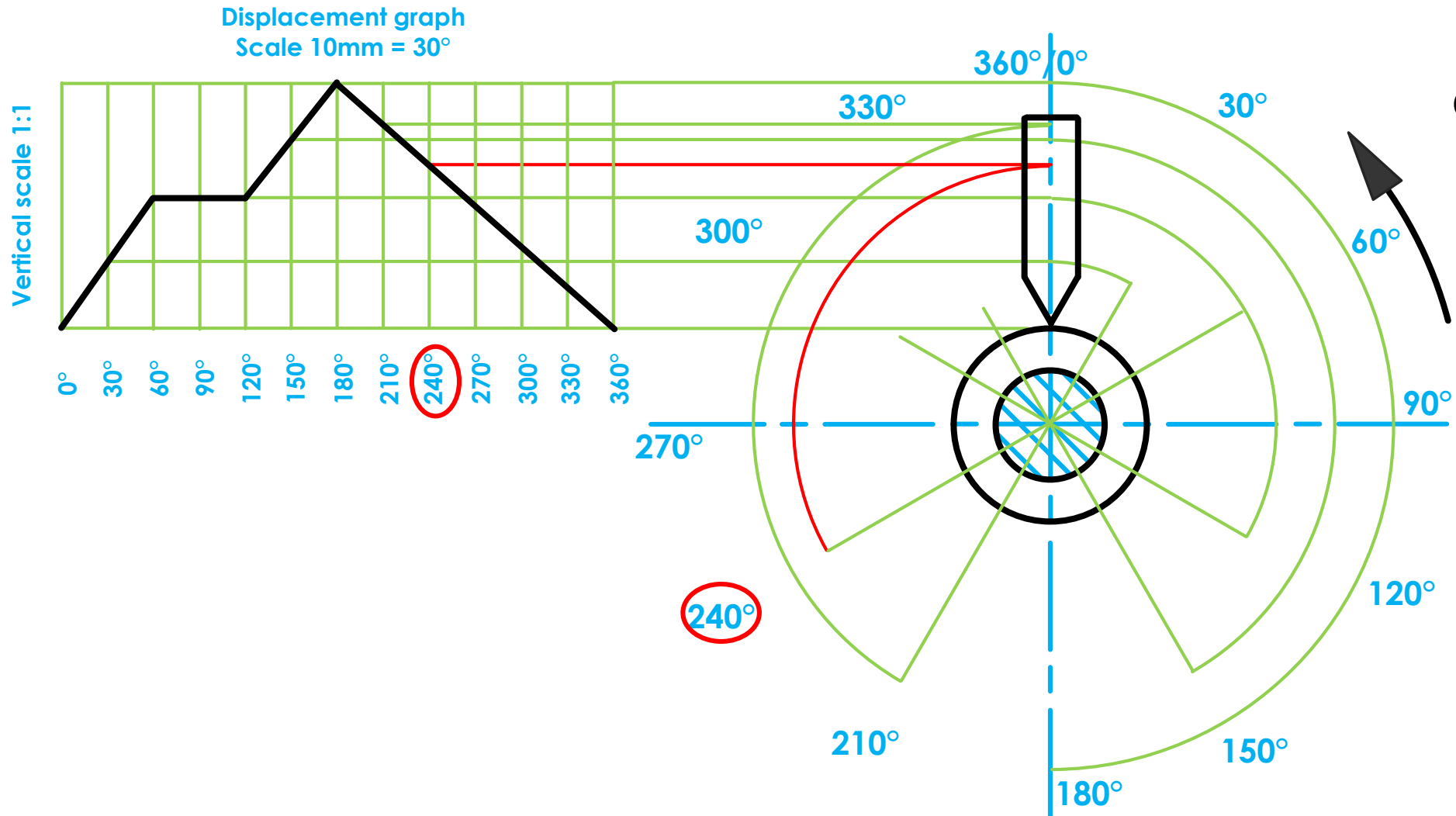
Loci of a CAM



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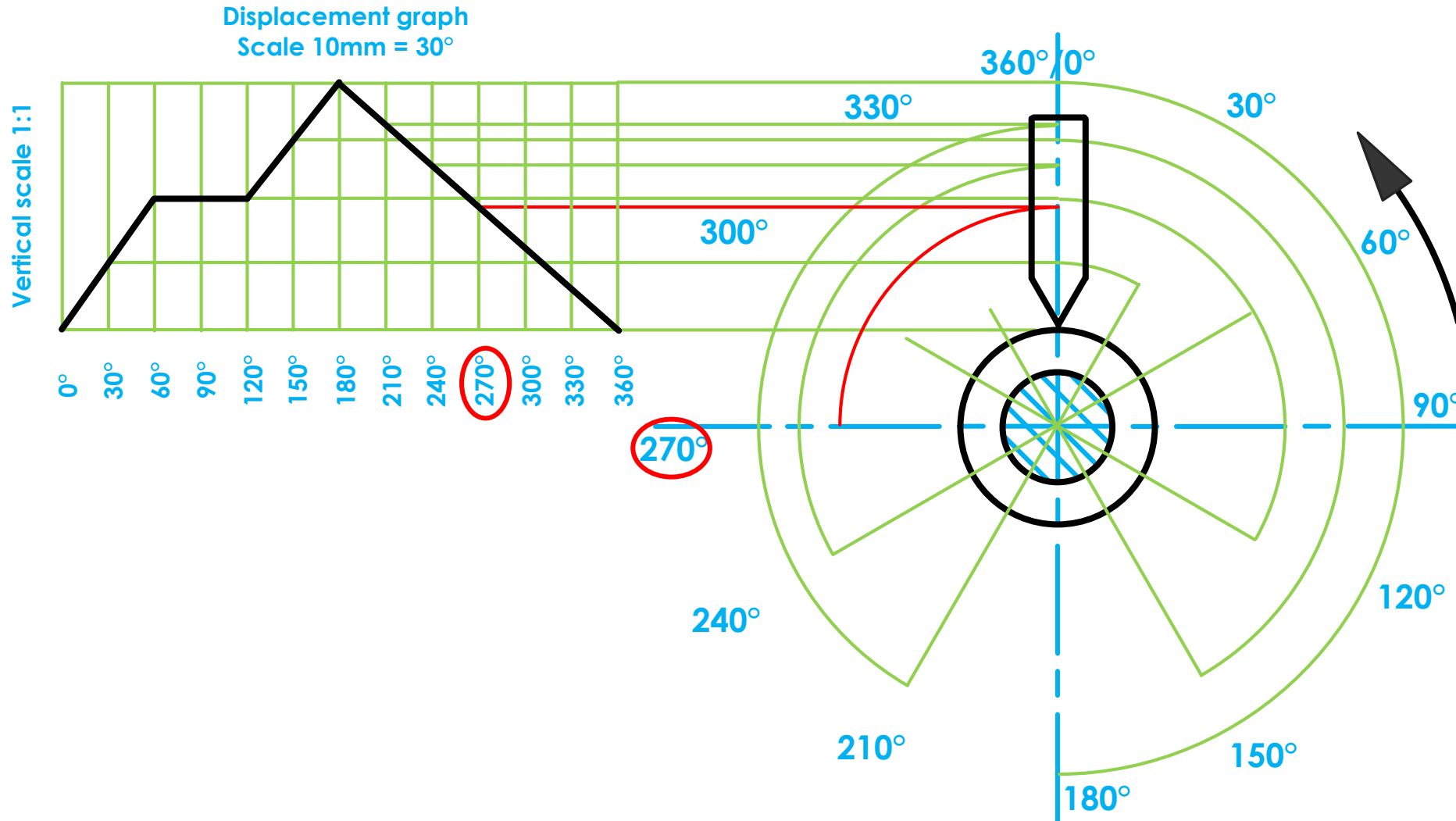


Loci of a CAM



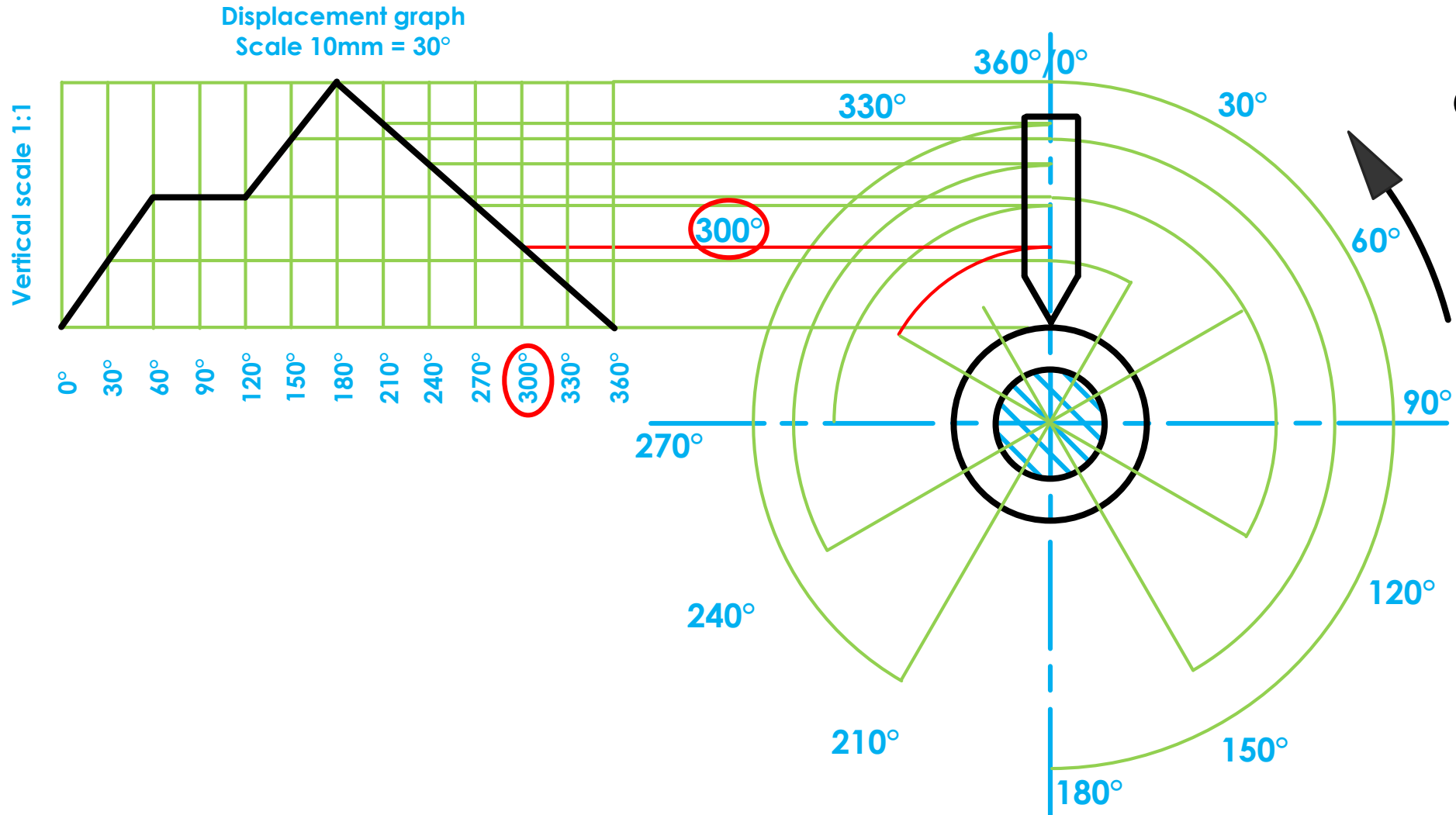
Anti-
clockwise

Loci of a CAM



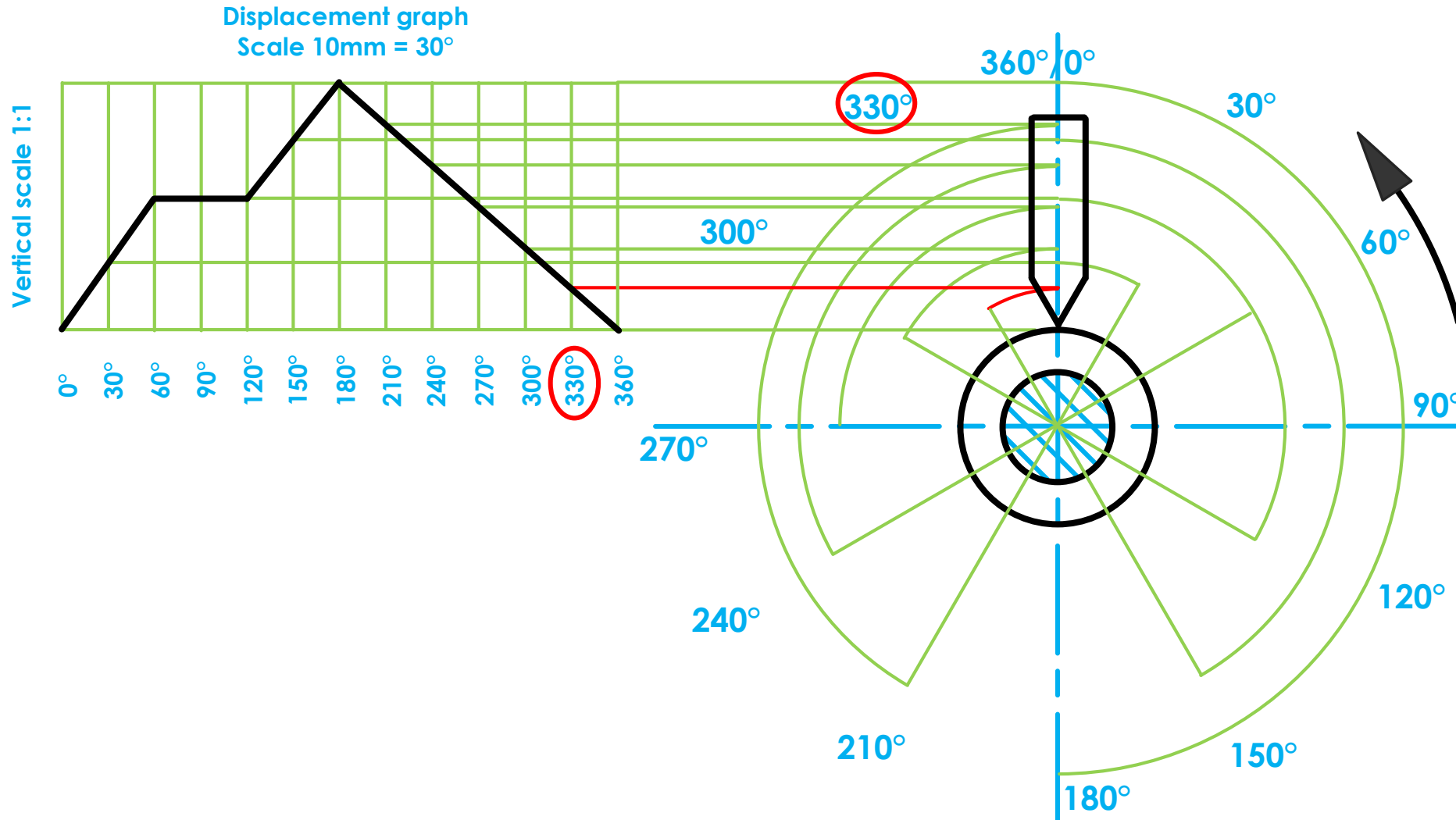
Anti-
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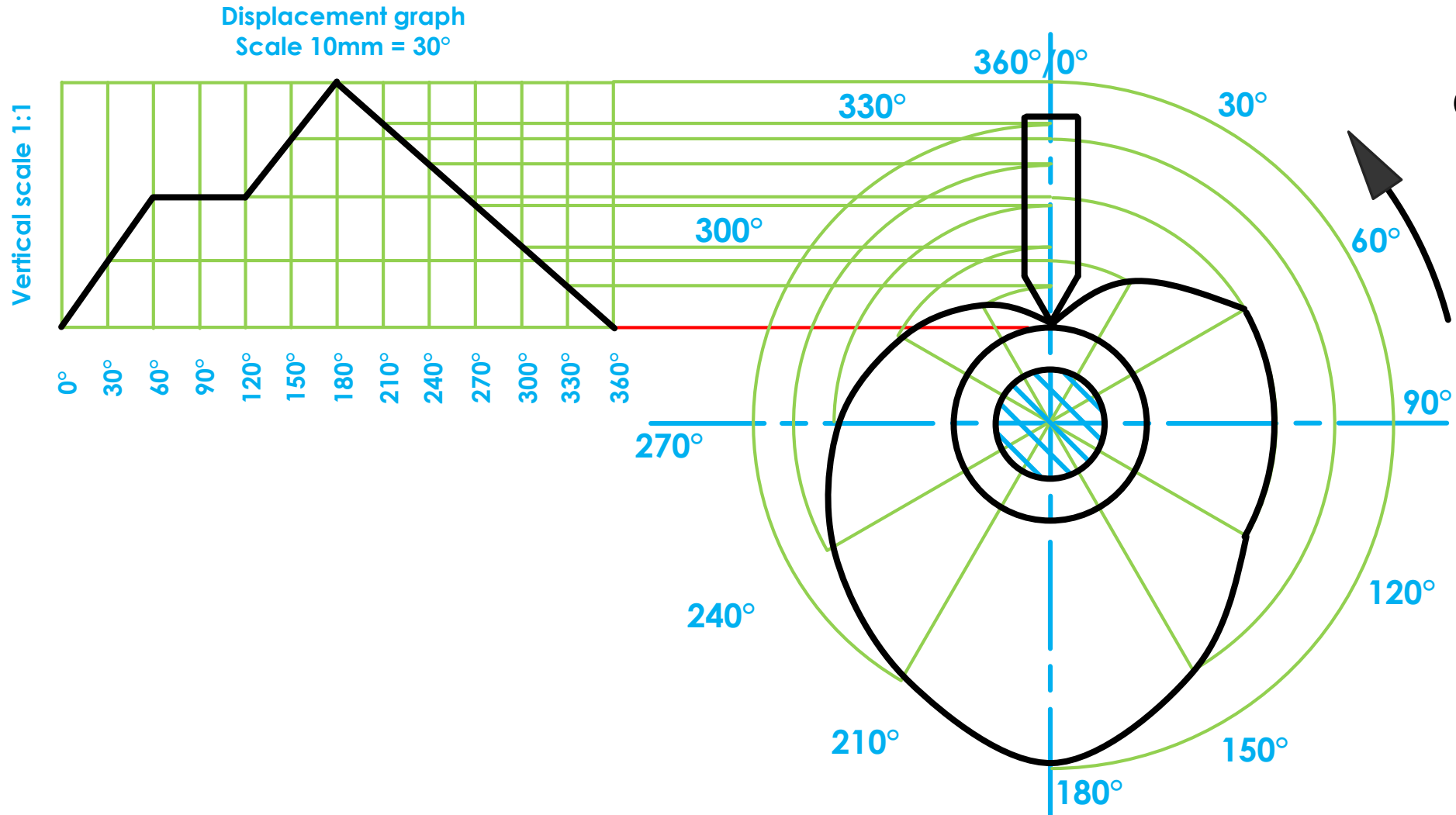
Anti-
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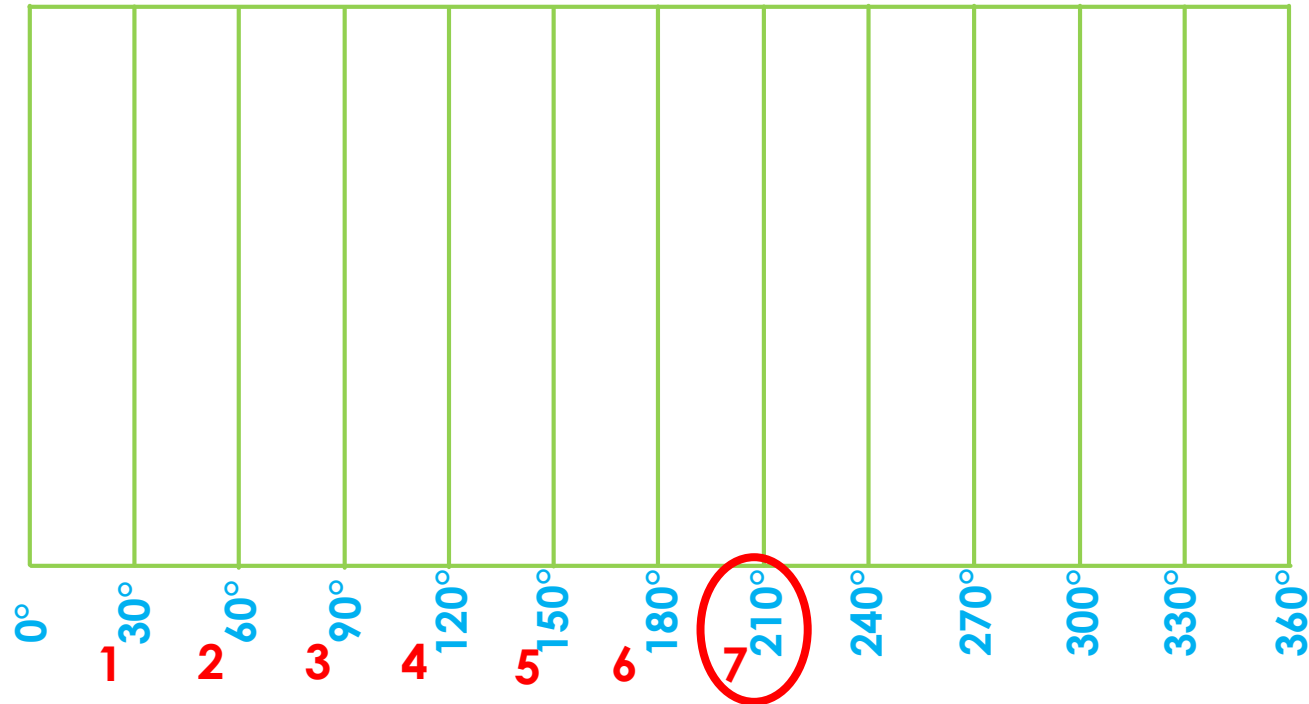


Anti-
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Loci of a CAM

Unequal number

- 0° - 210° : Rise for 50mm by means of **acceleration and retardation movement**
- 210° - 360° : Back to original position by means of **uniform motion**



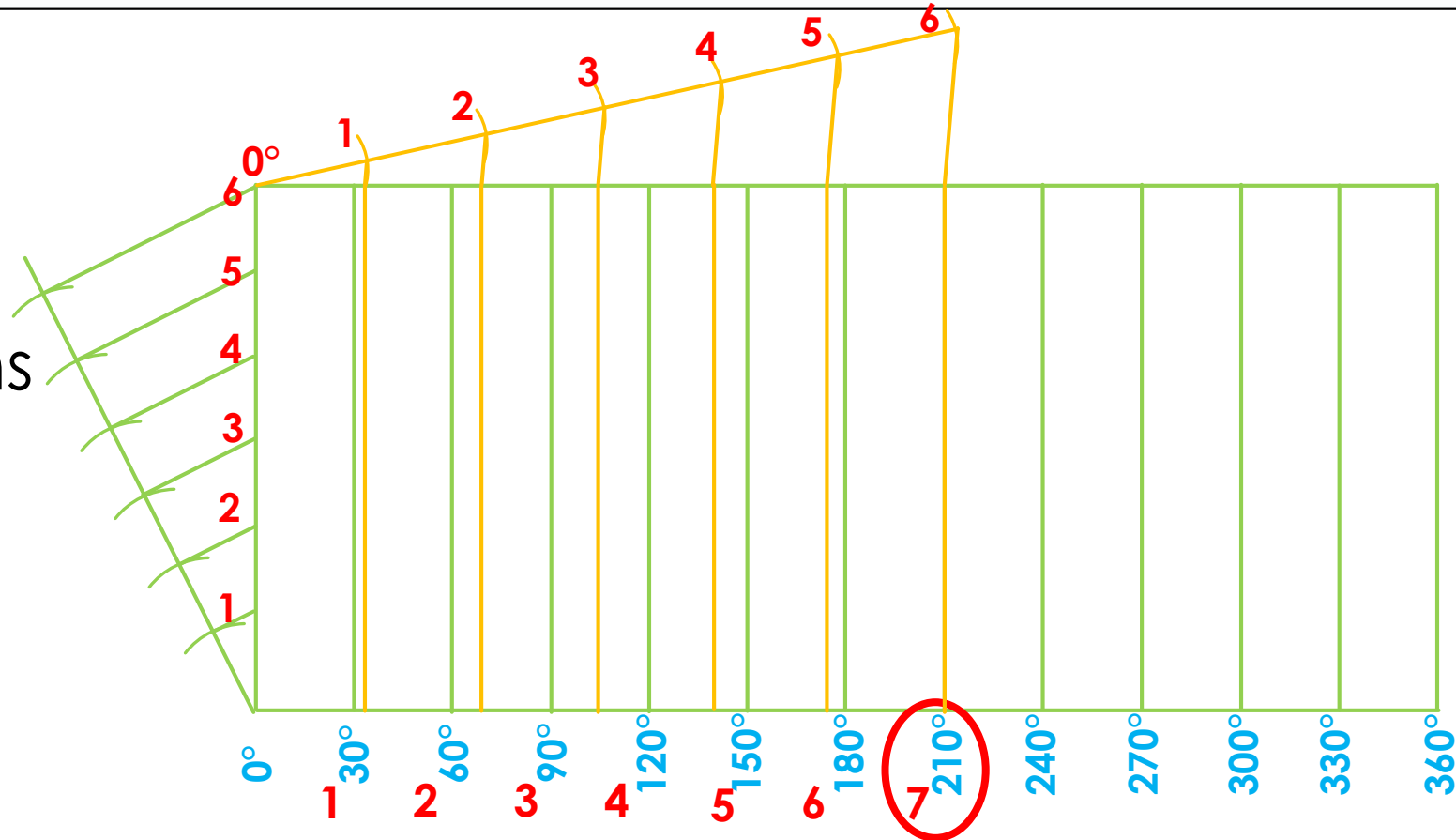
Displacement graph
Scale $10\text{mm} = 30^\circ$

Vertical scale 1:1

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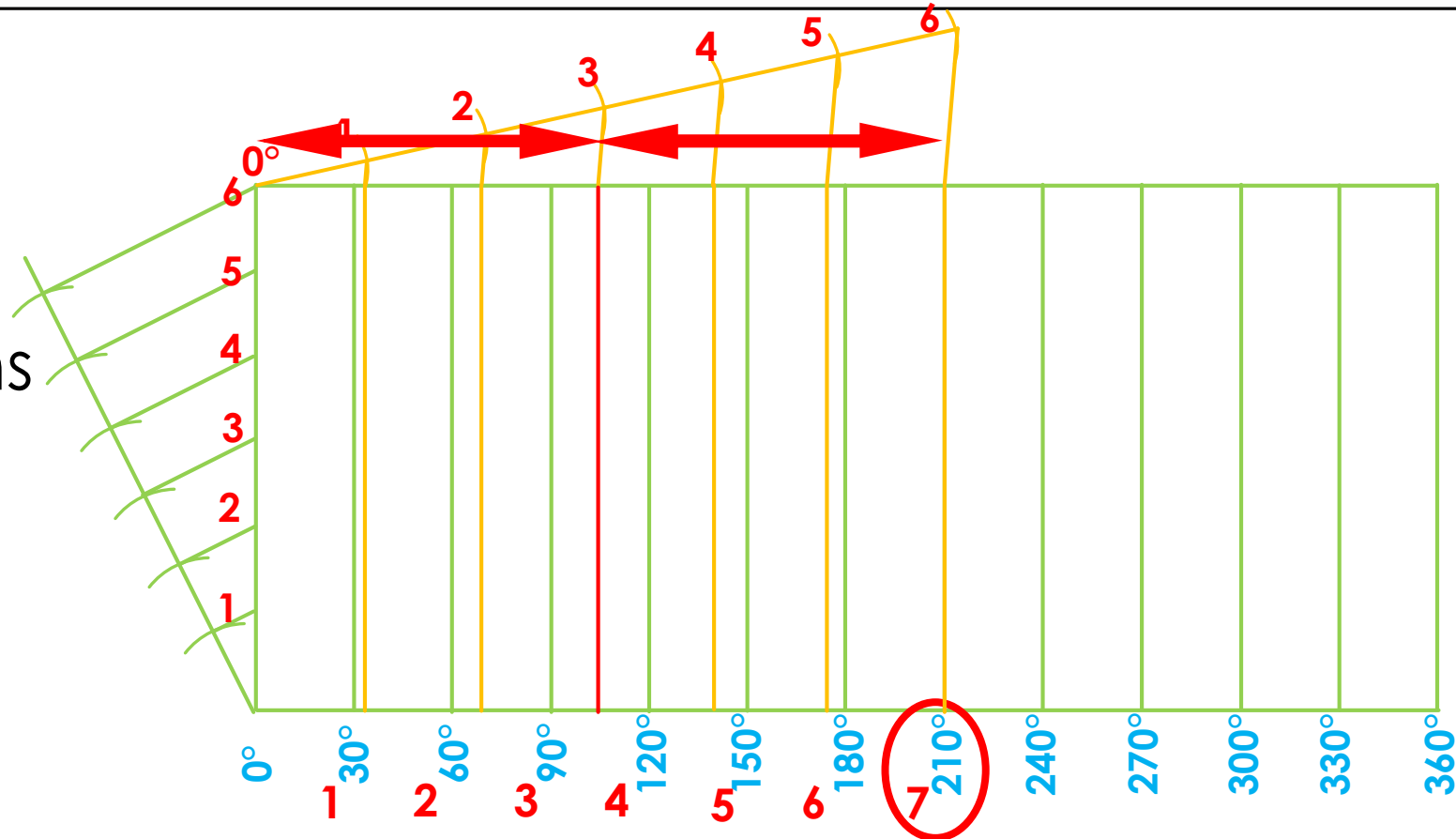


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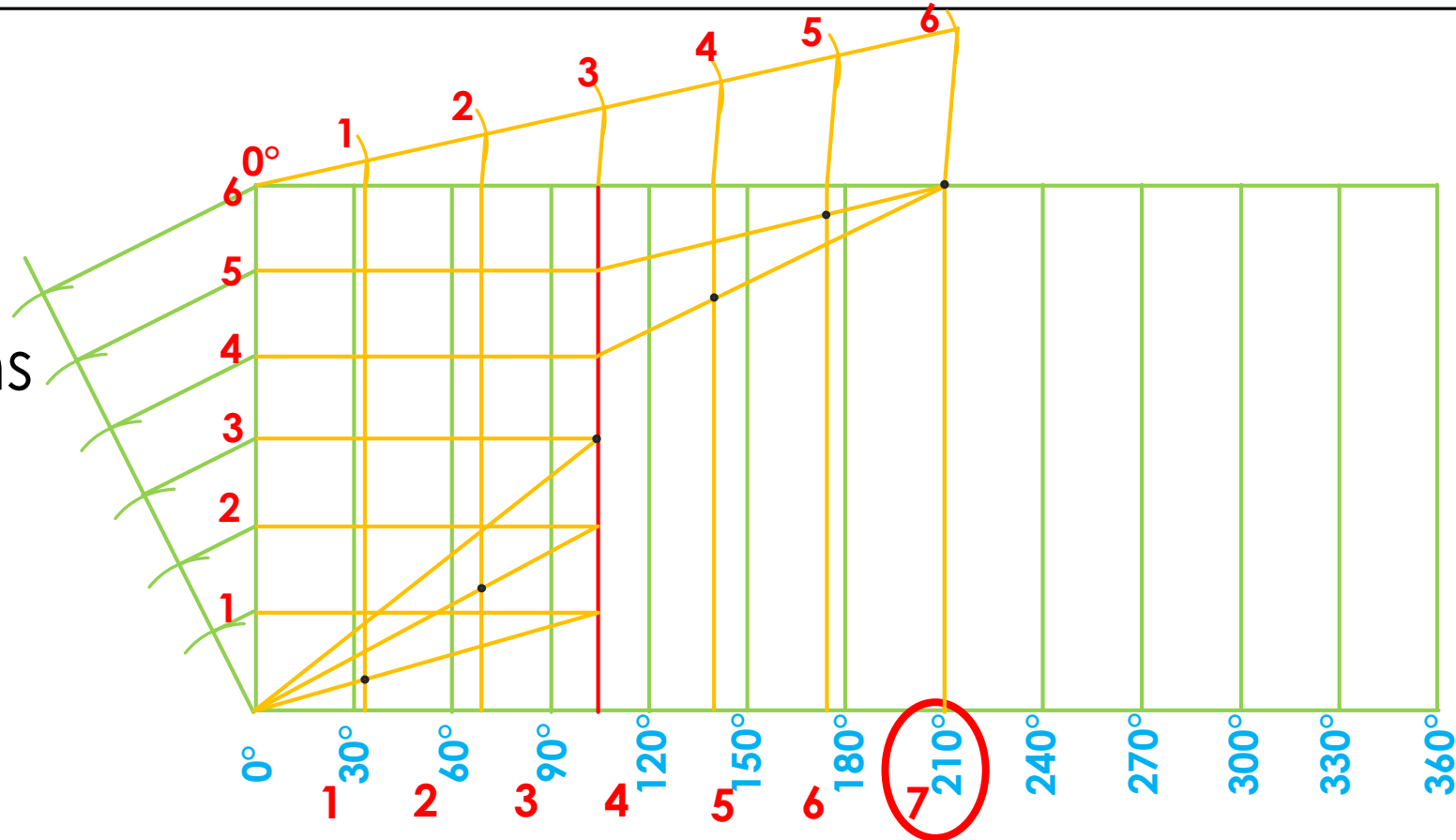
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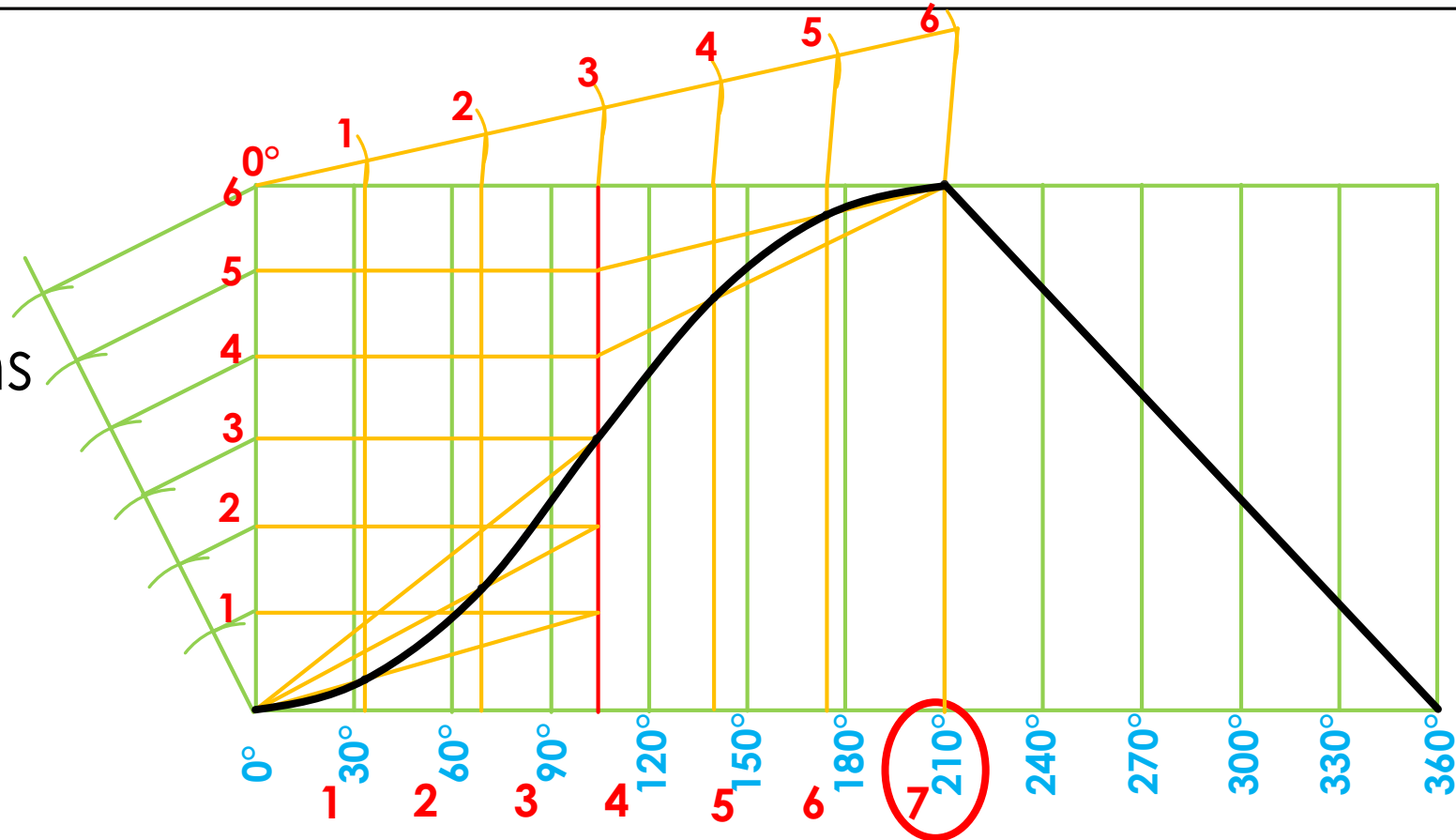
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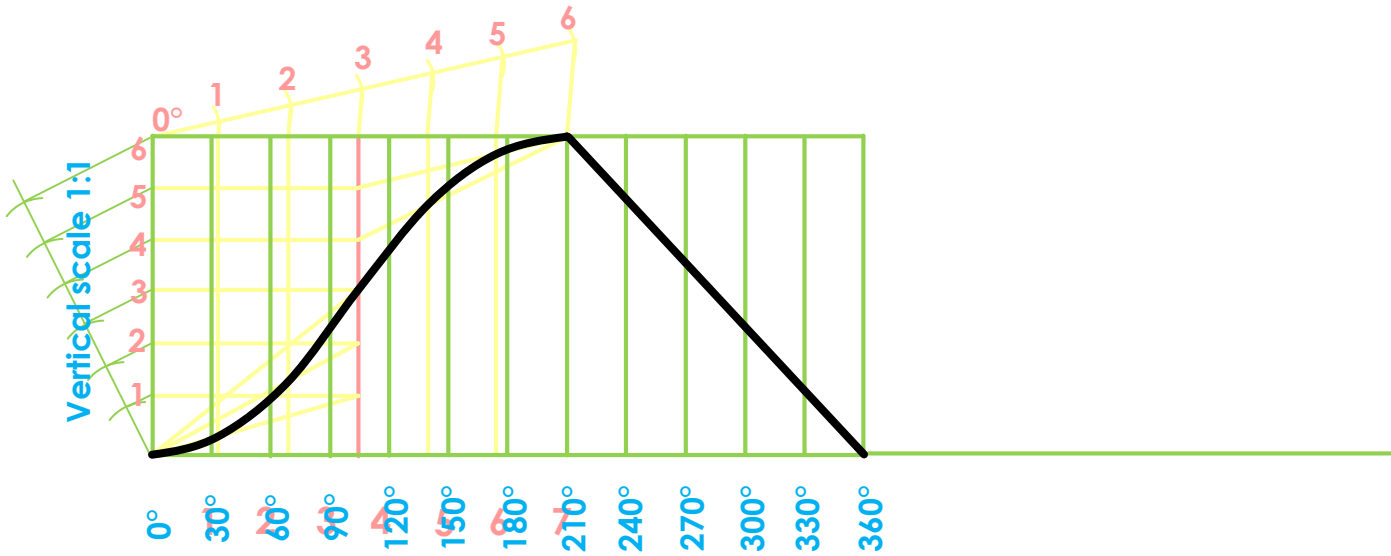
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Vertical scale 1:1

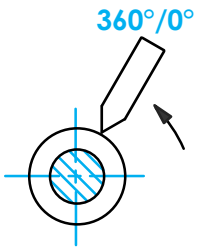
Loci of a CAM

- ➡ Transfer the information on the displacement graph to the cam plate once the displacement graph is developed

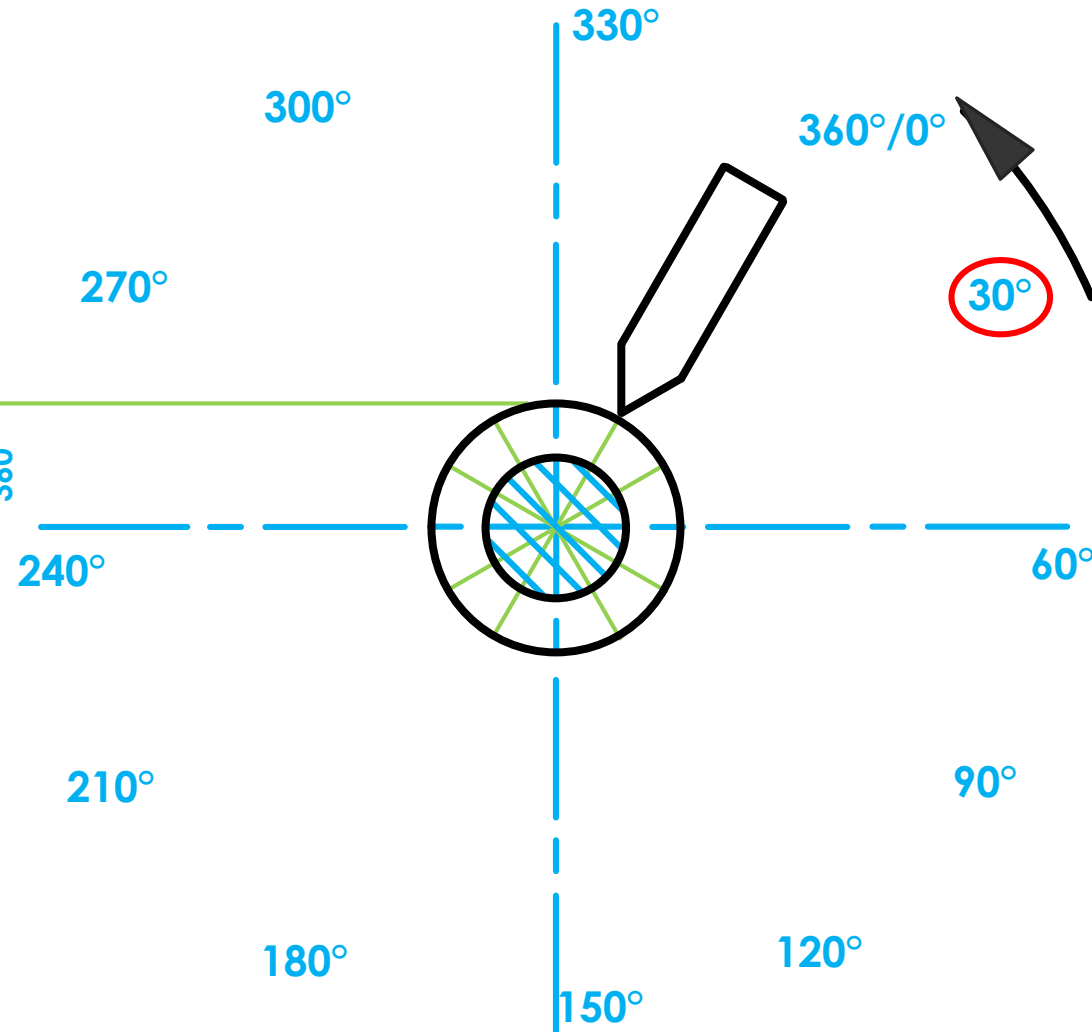
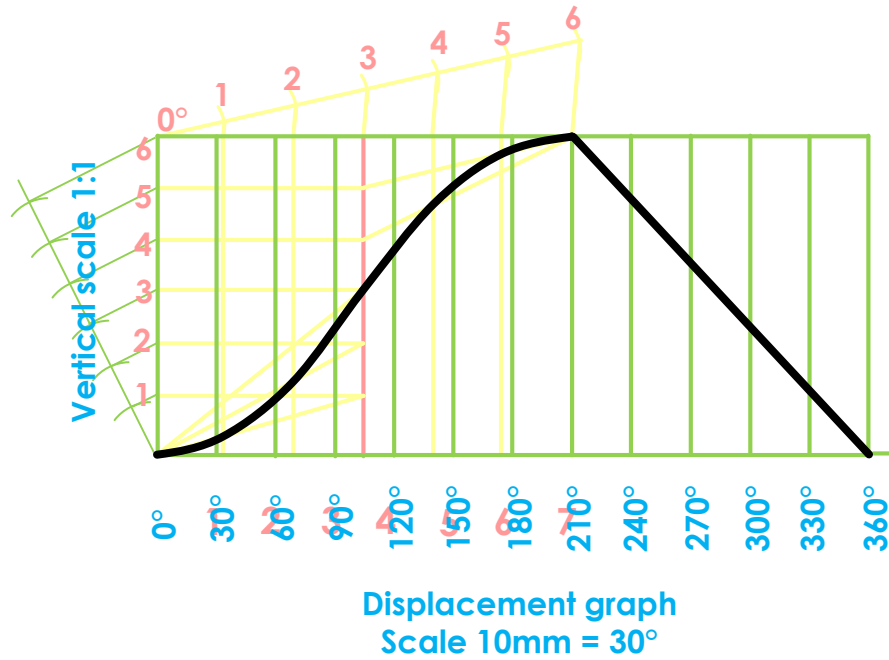
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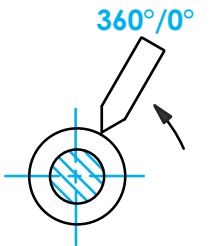
Displacement graph
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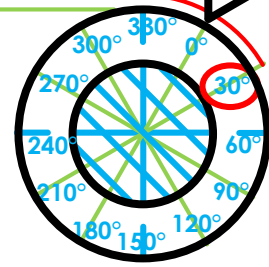
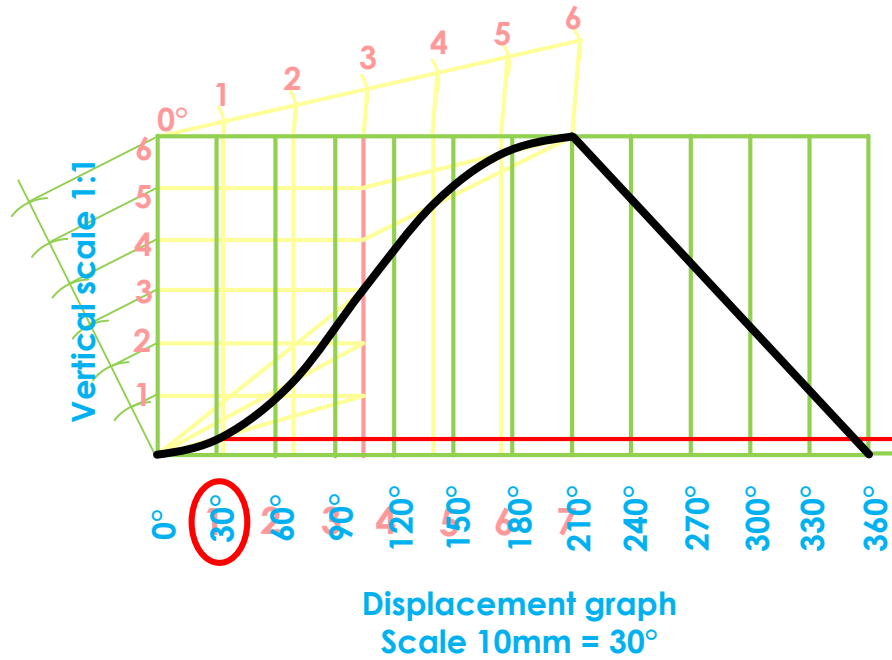
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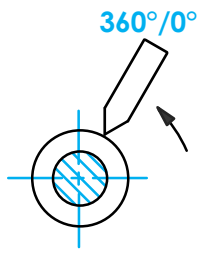
Anti-clockwise



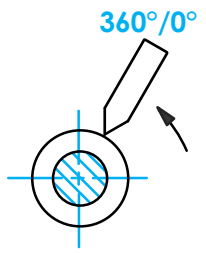
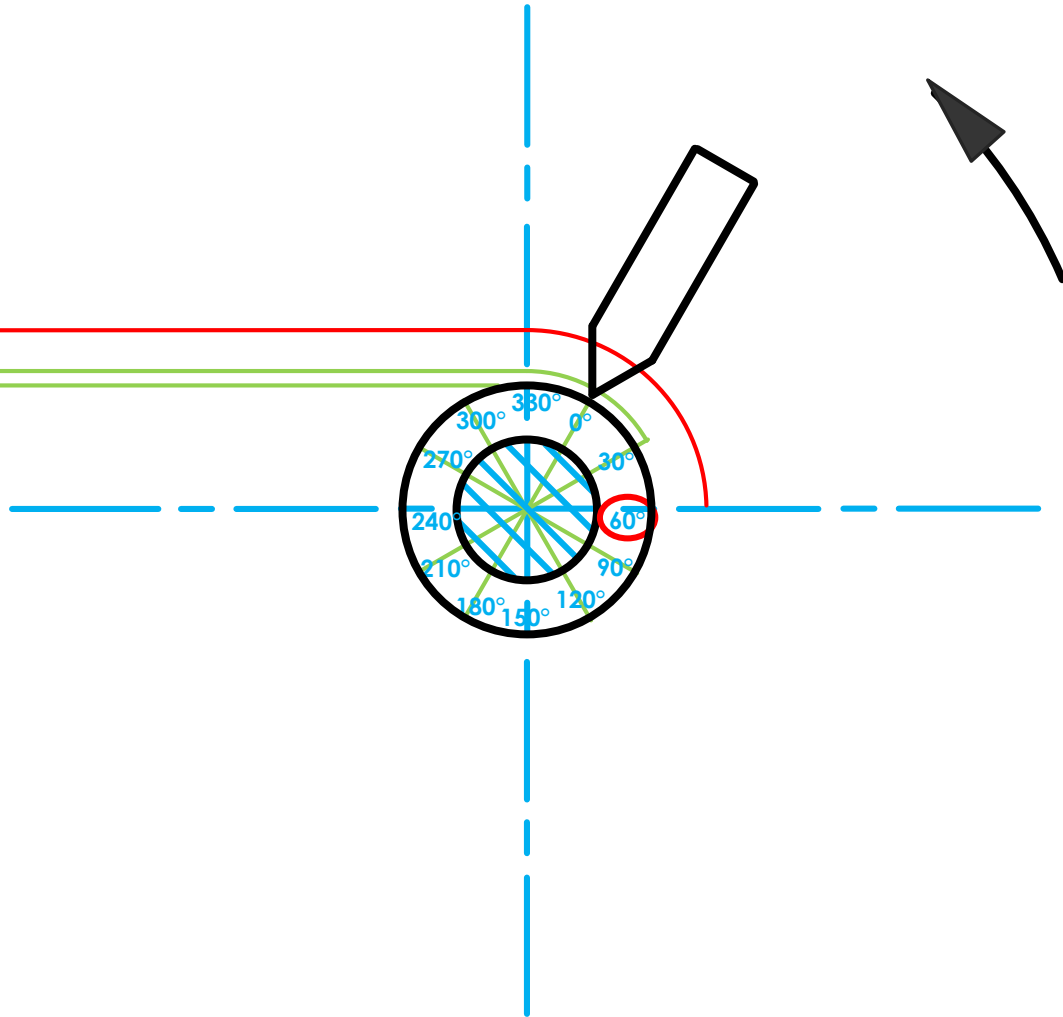
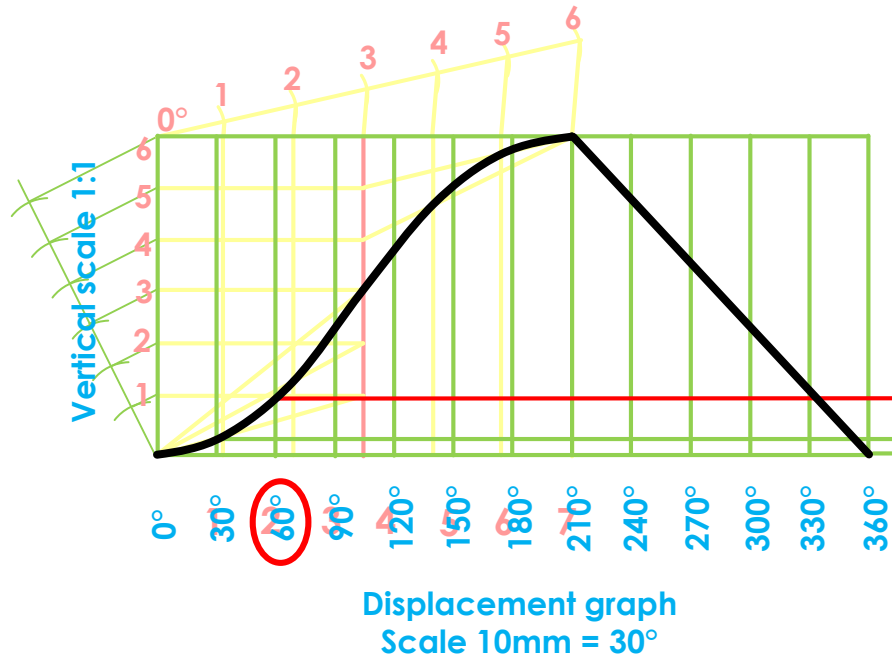
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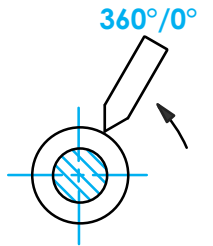
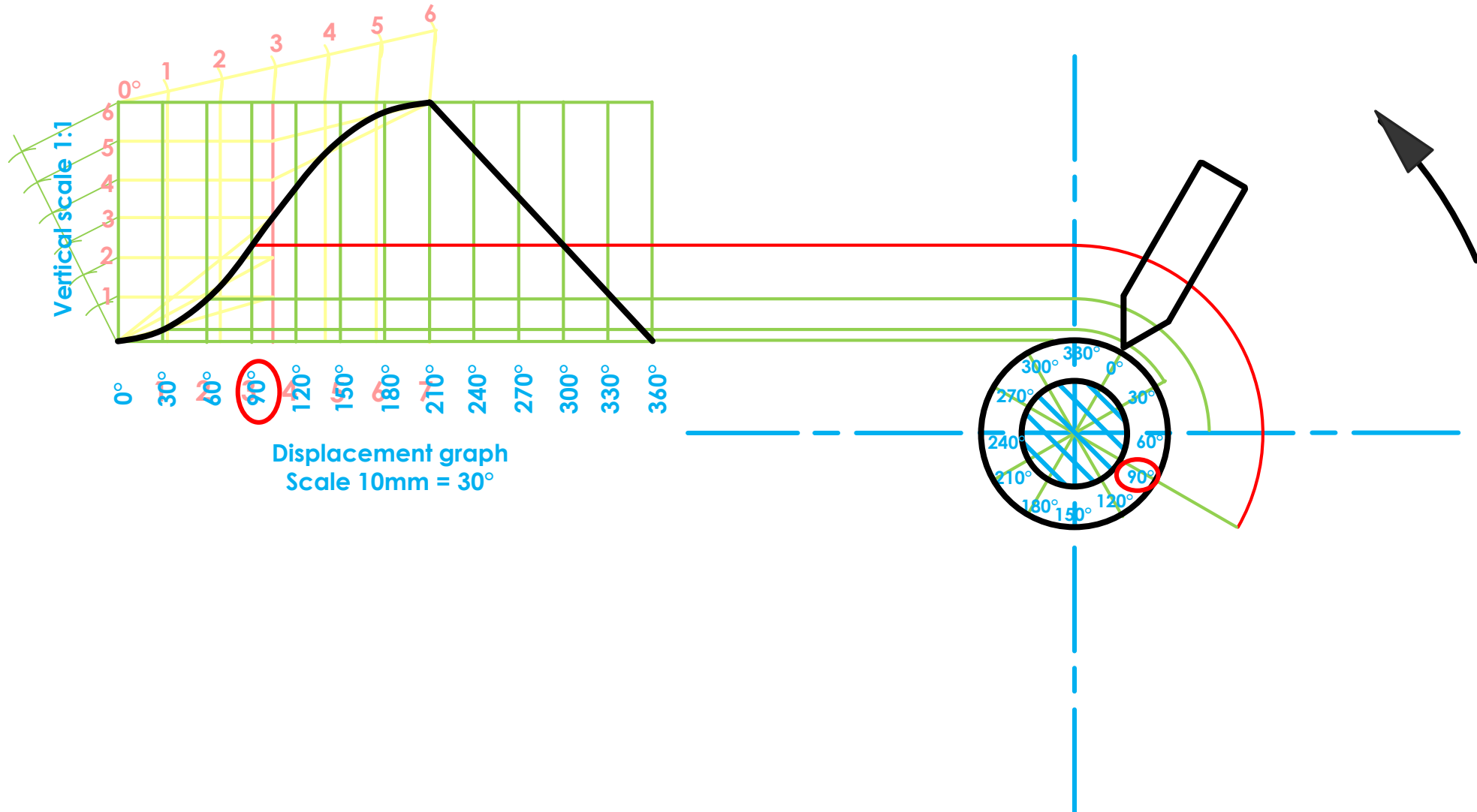
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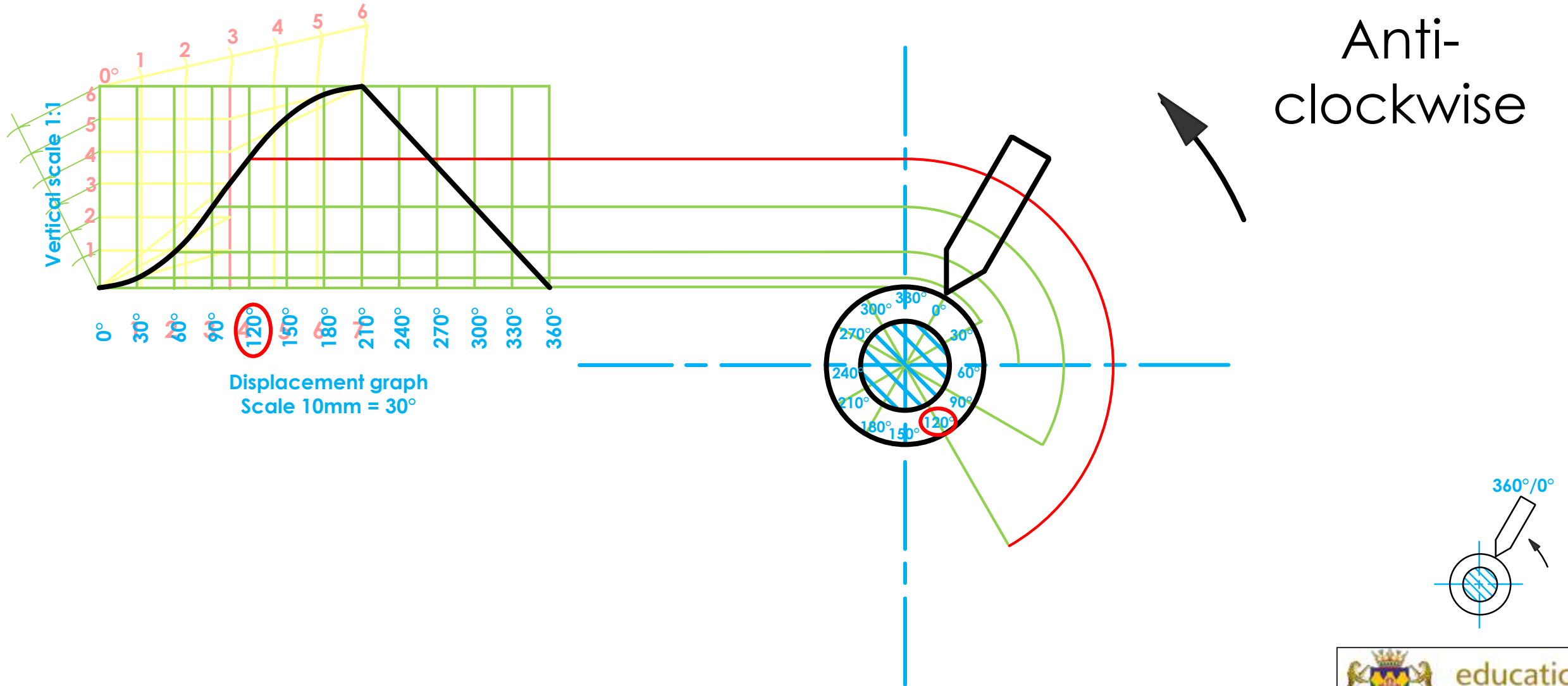
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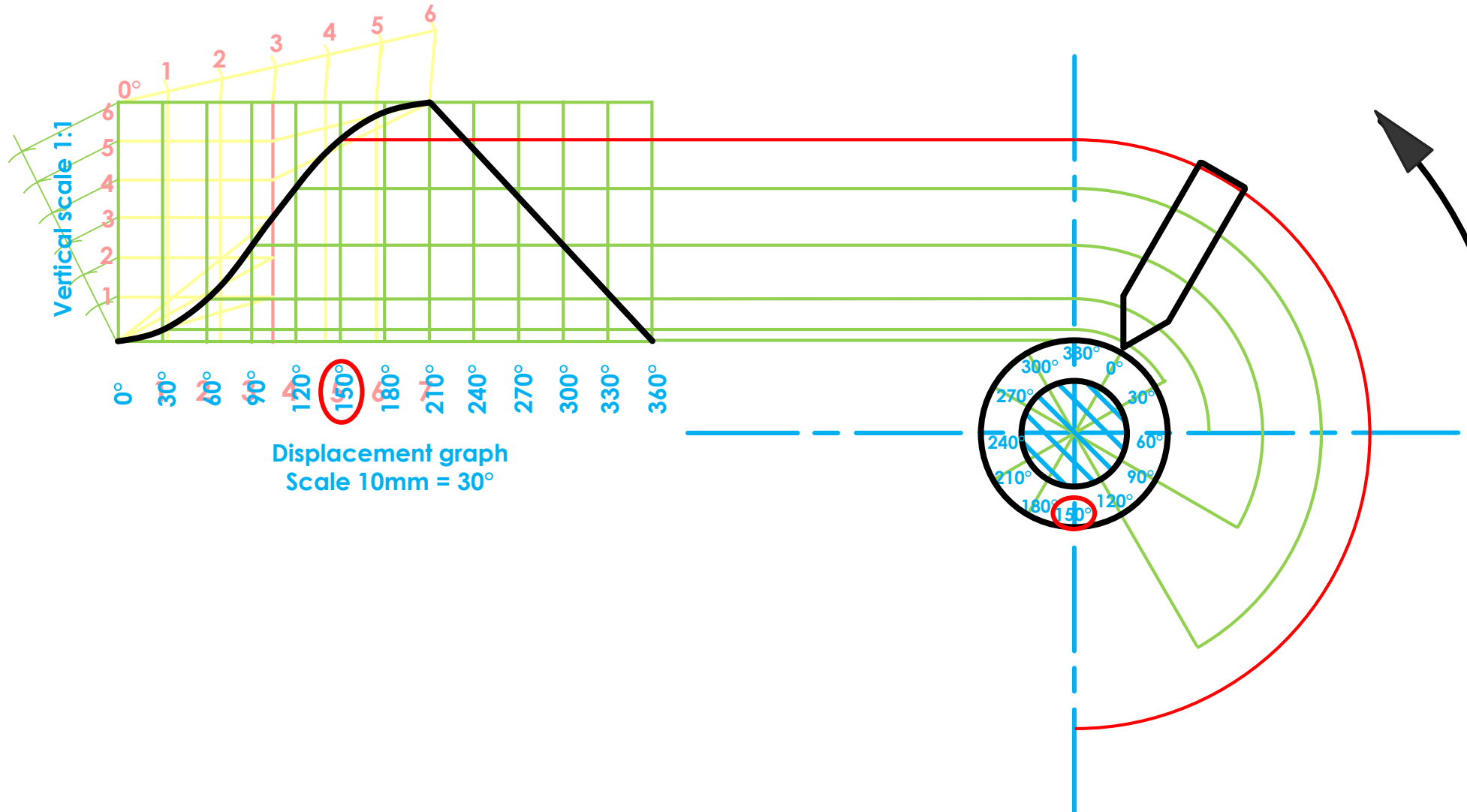
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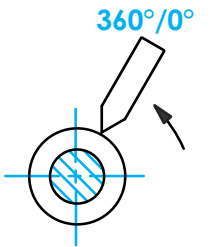
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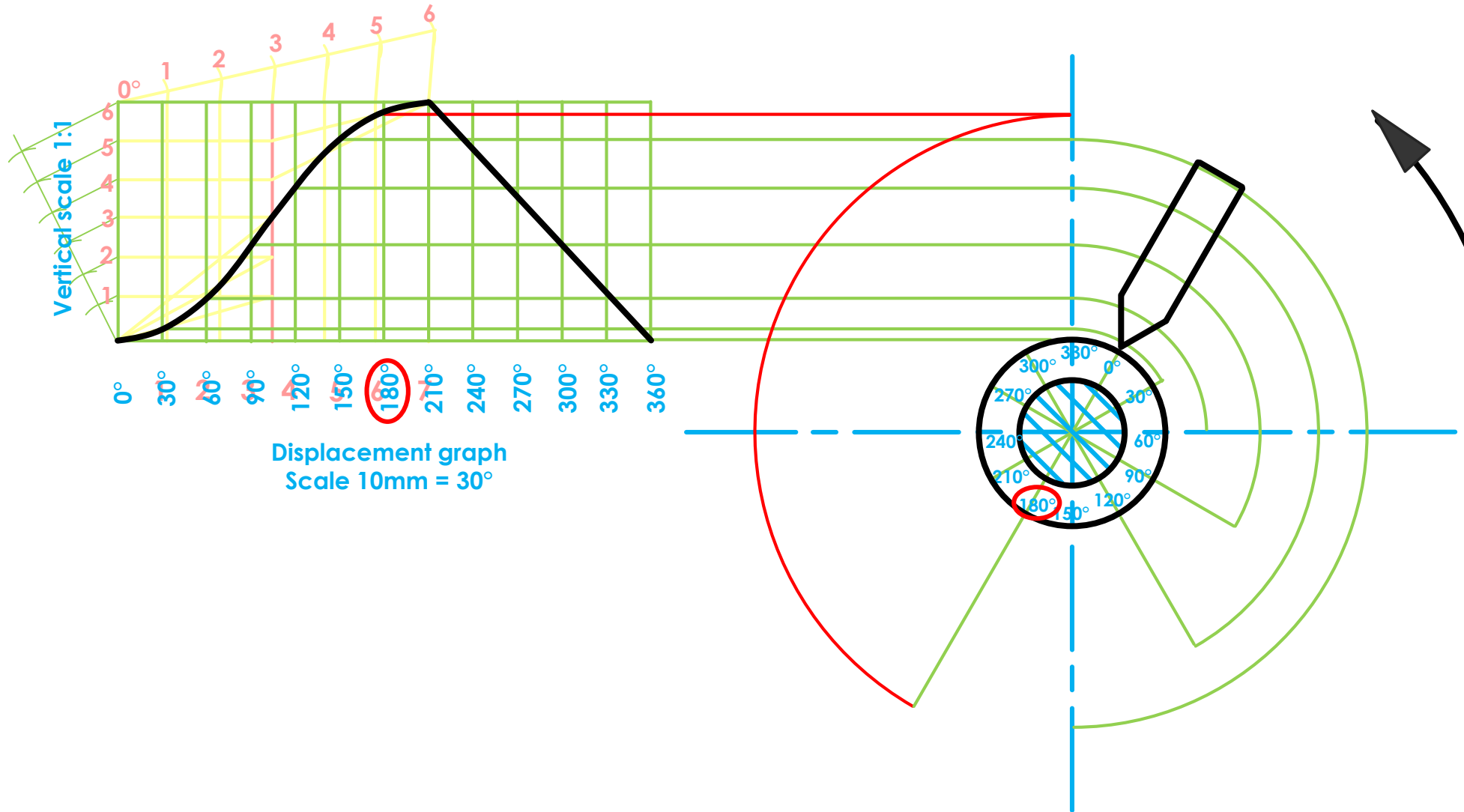
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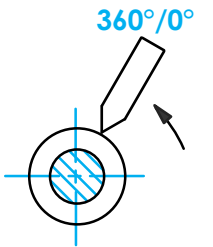
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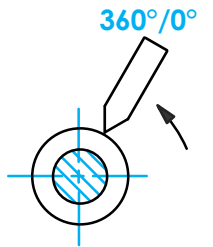
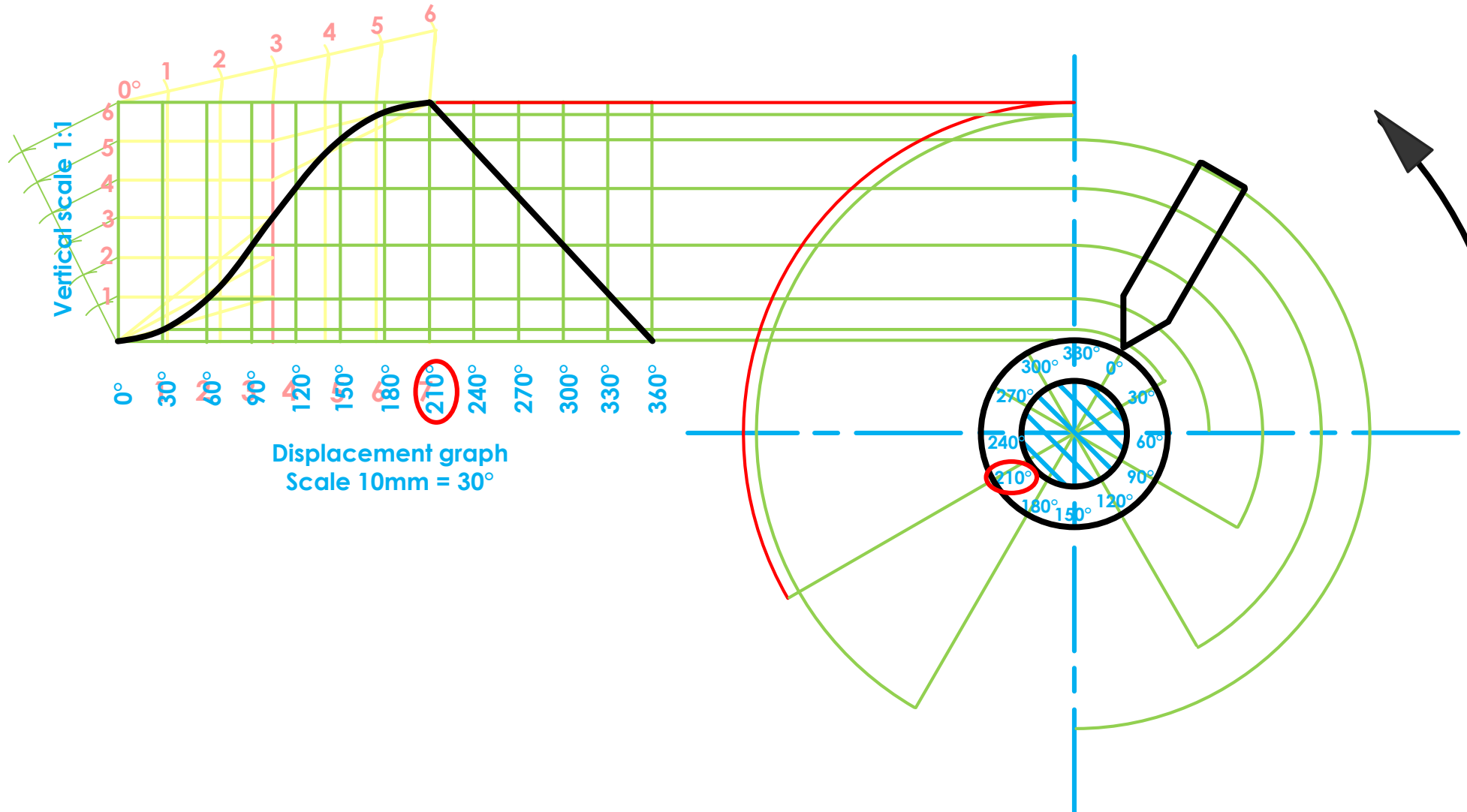
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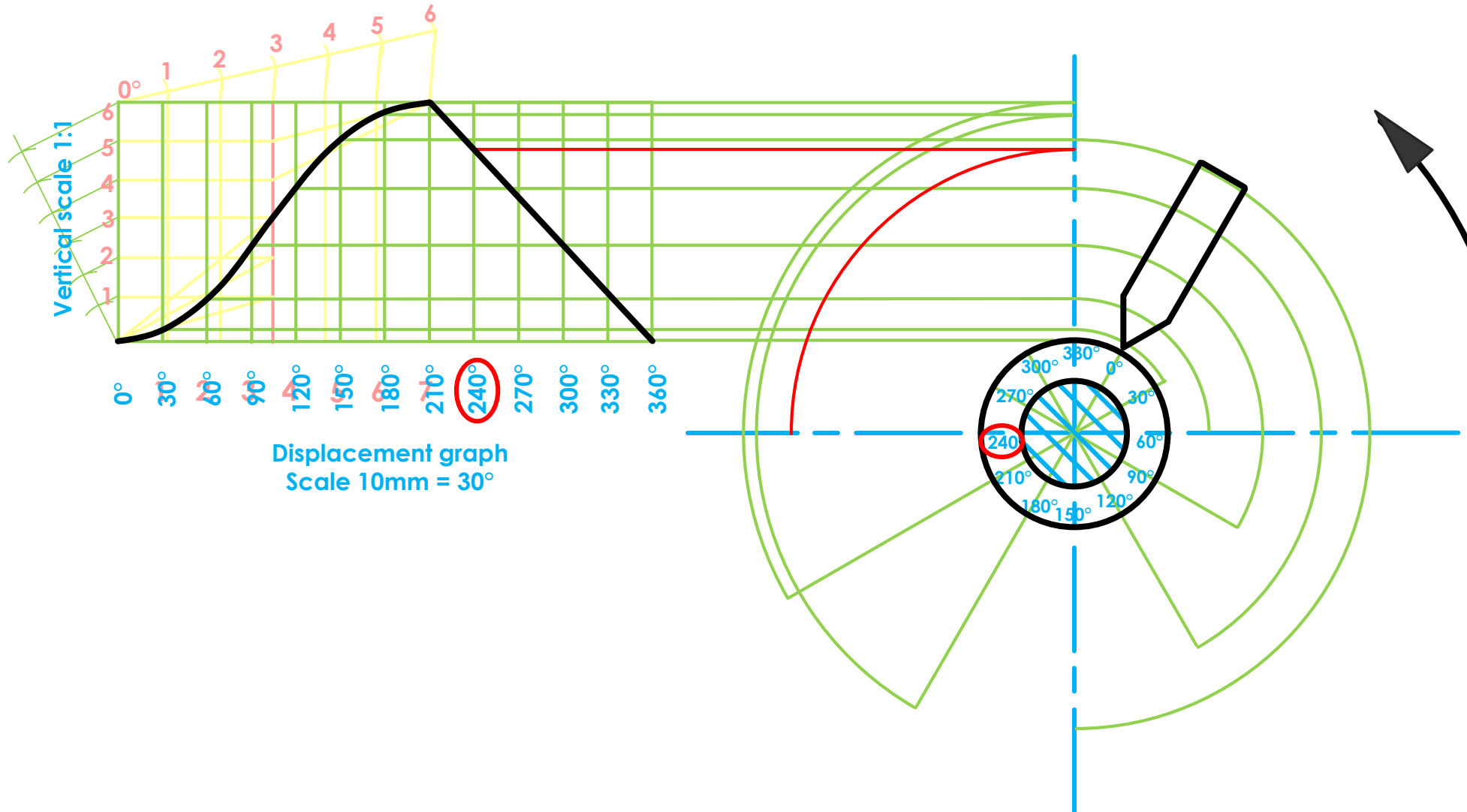
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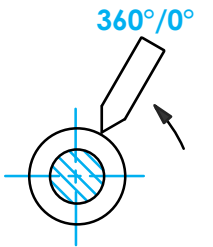
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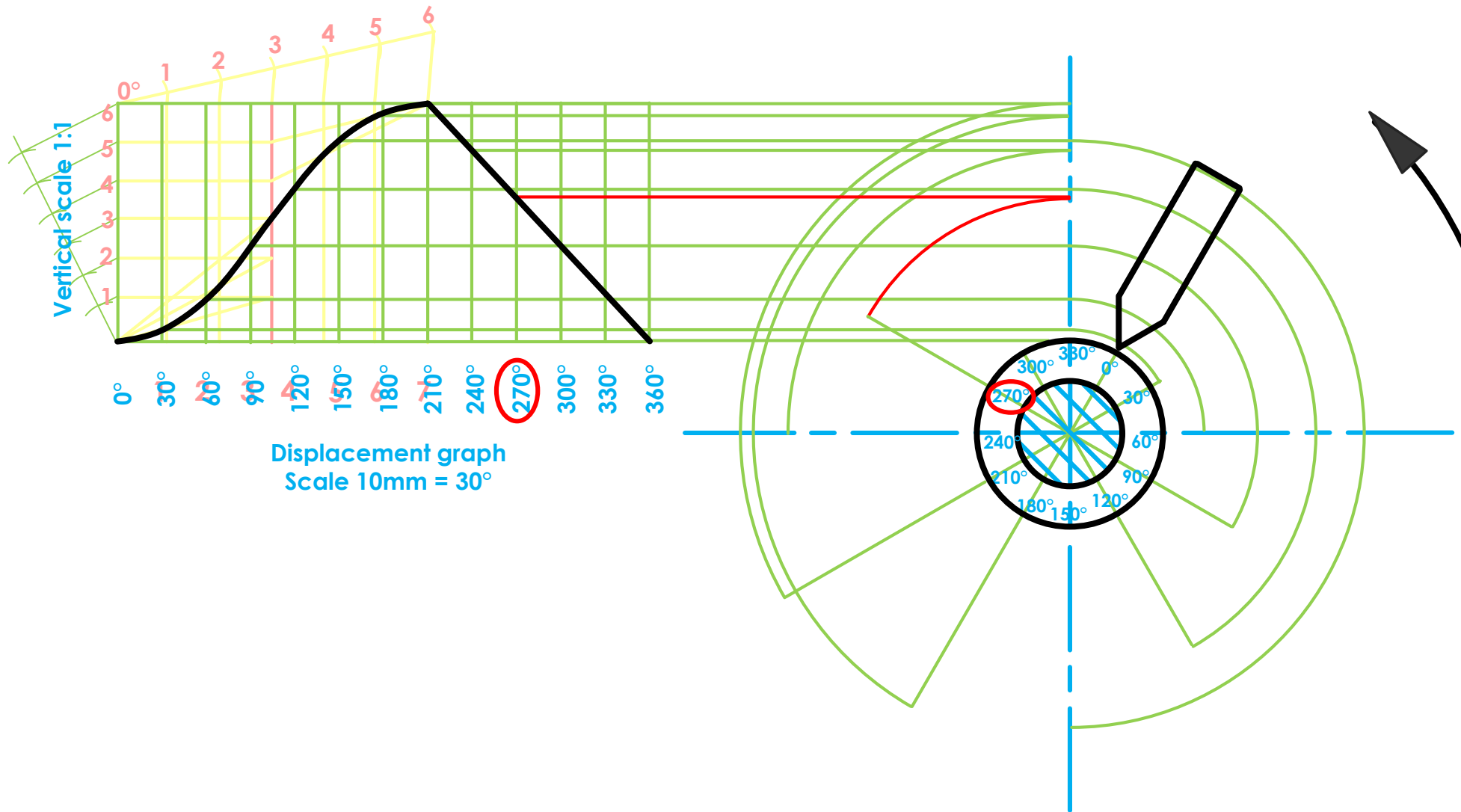
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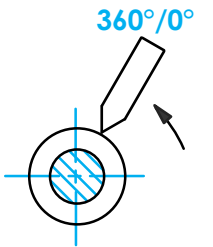
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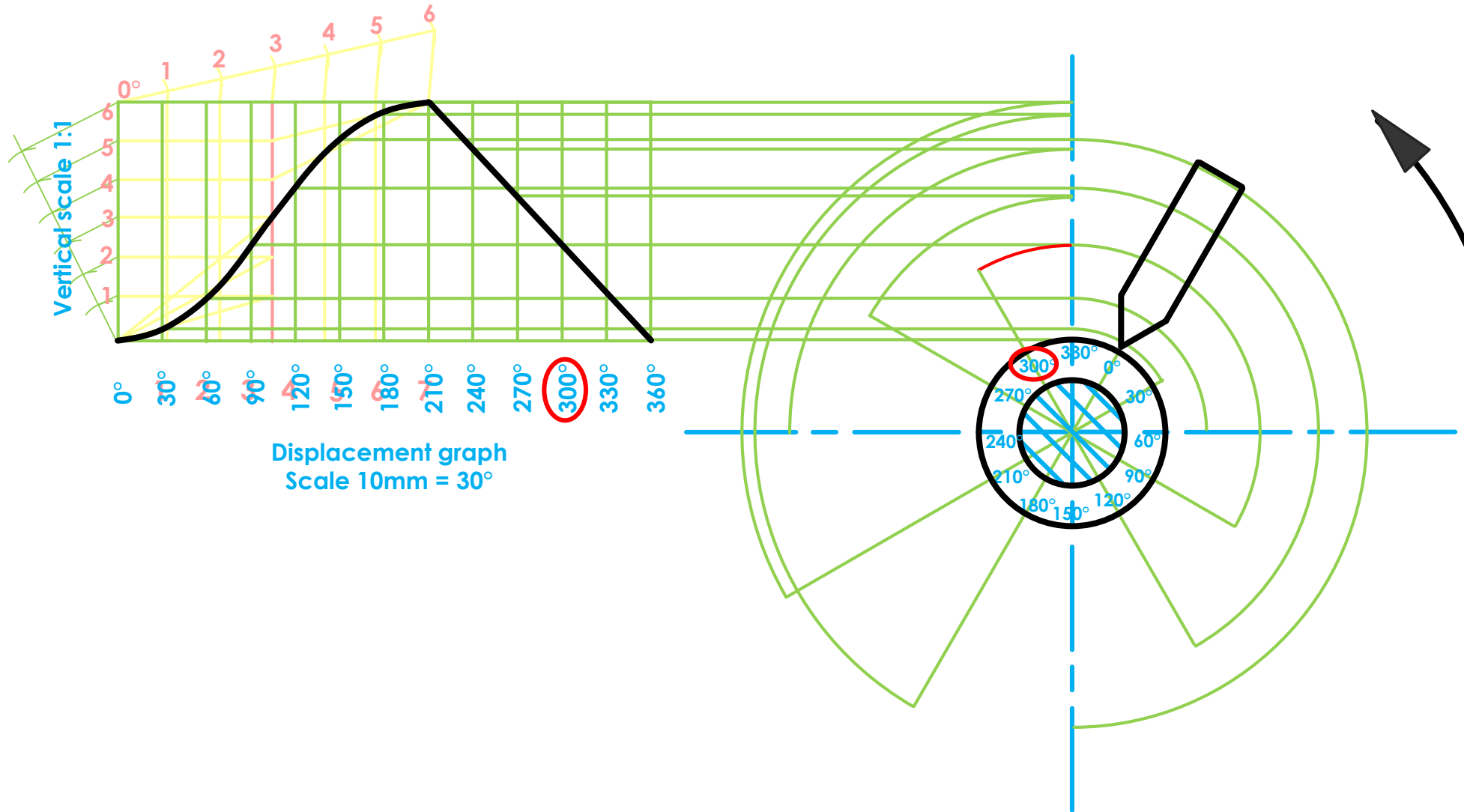
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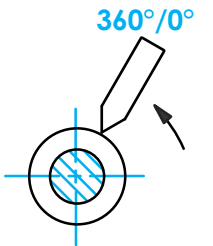
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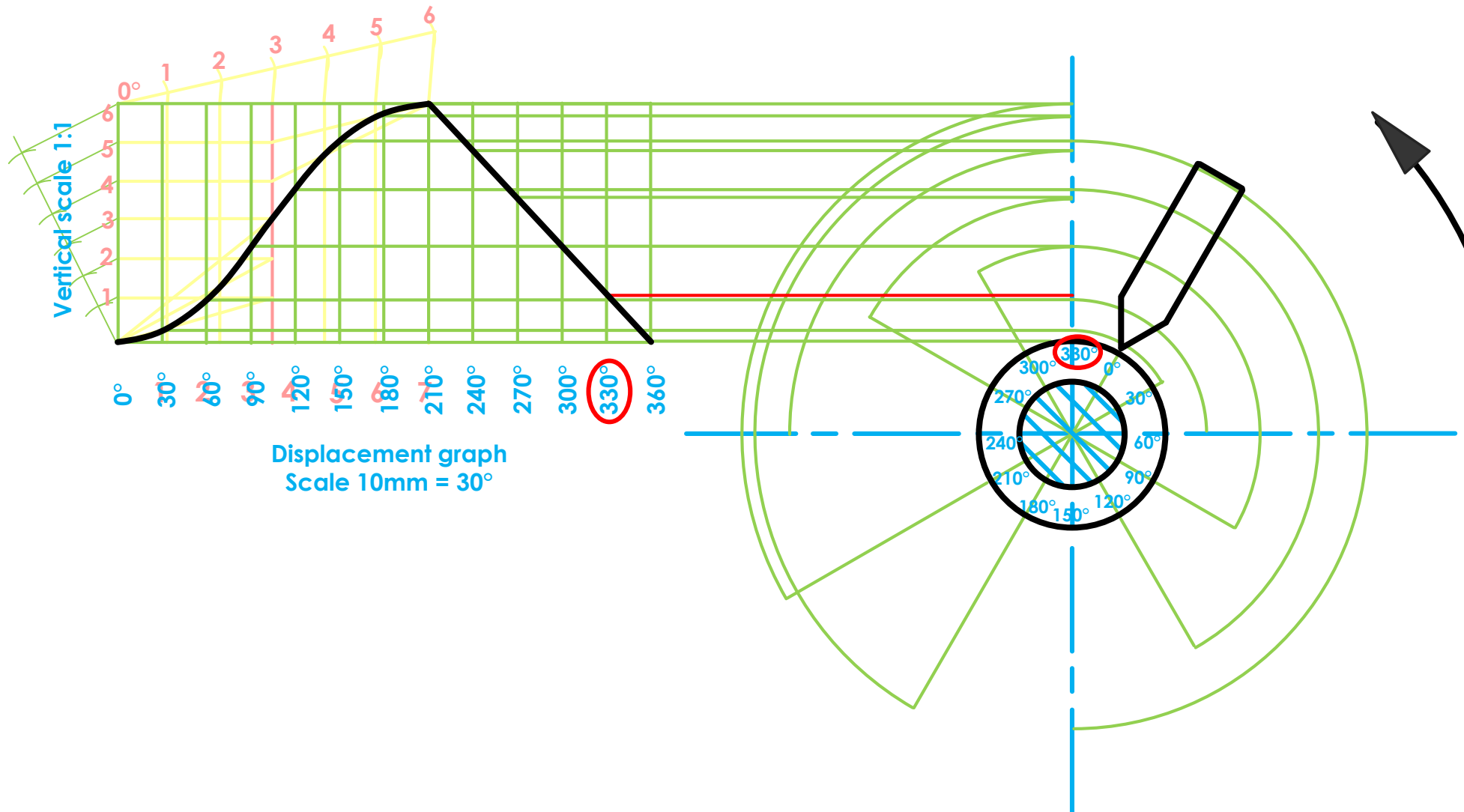
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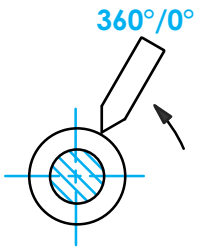
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