



LOCI of a CAM

Grade 11 & 12

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

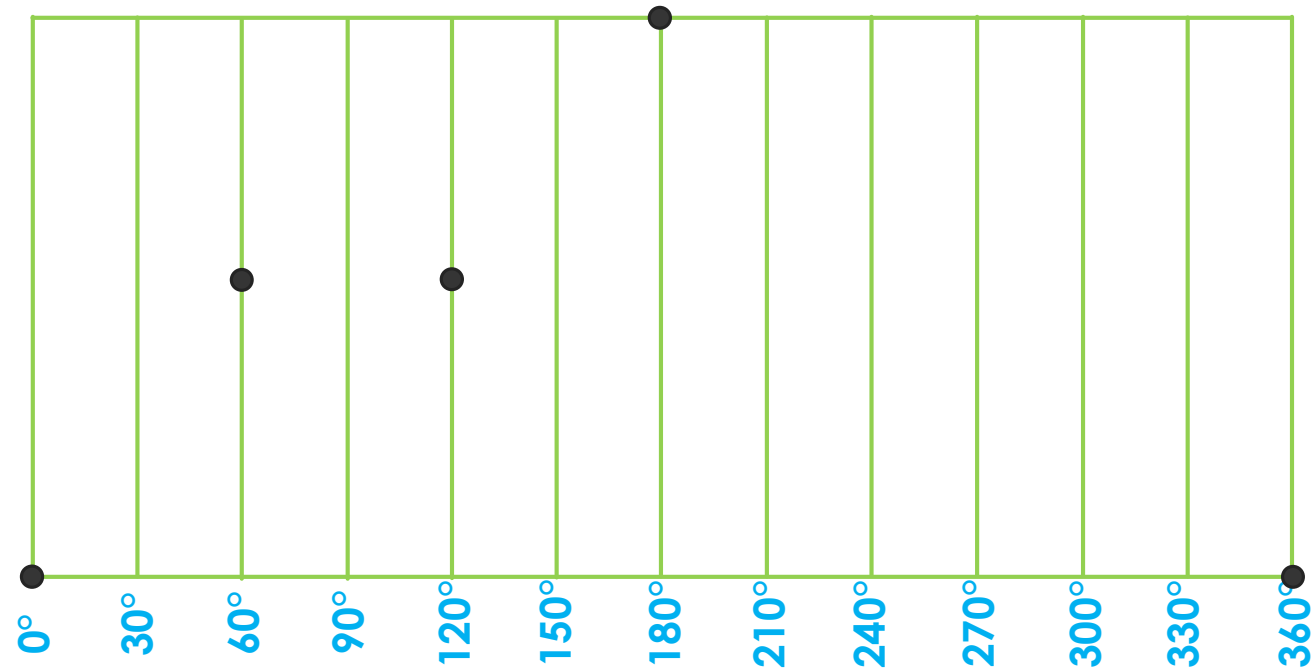
Loci of a CAM: General information

- There are three different type of movements:
 - Uniform movement
 - Harmonic movement (grade 12 content)
 - Acceleration and retardation movement (grade 12 content)

Loci of a CAM: UNIFORM MOVEMENT

By means of uniform motion

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



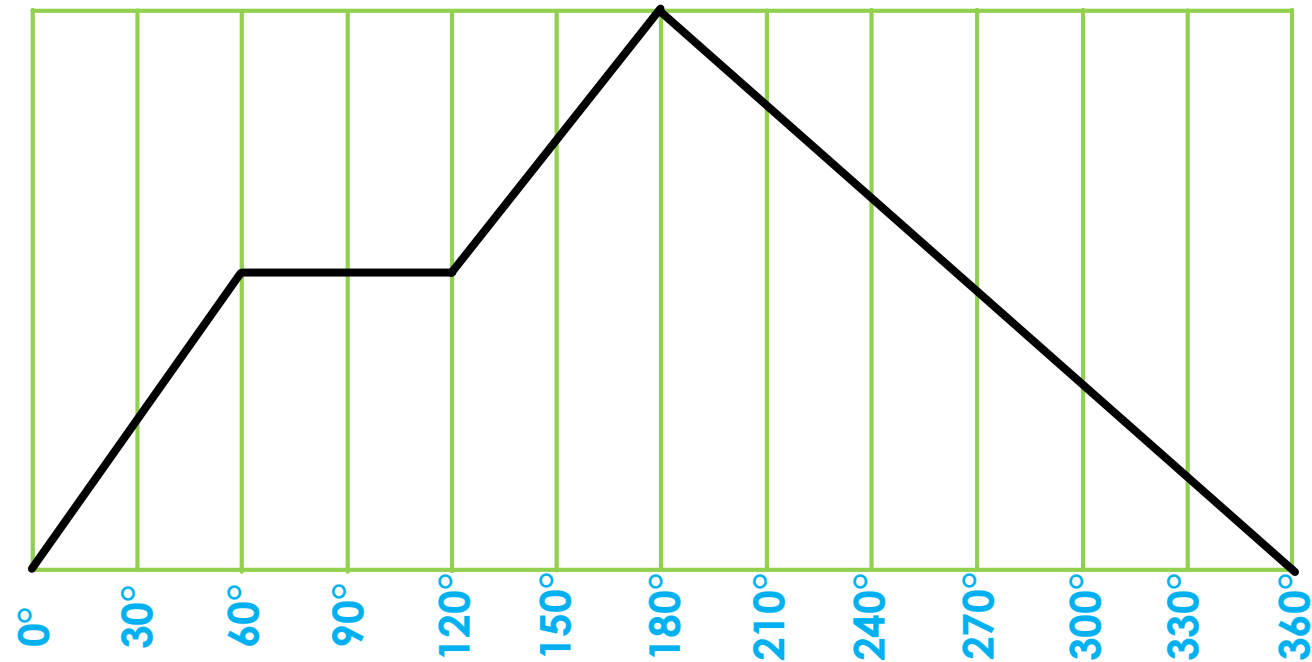
Displacement graph
Scale 10mm = 30°

Vertical scale 1:1

Loci of a CAM: UNIFORM MOVEMENT

By means of uniform motion

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



Vertical scale 1:1

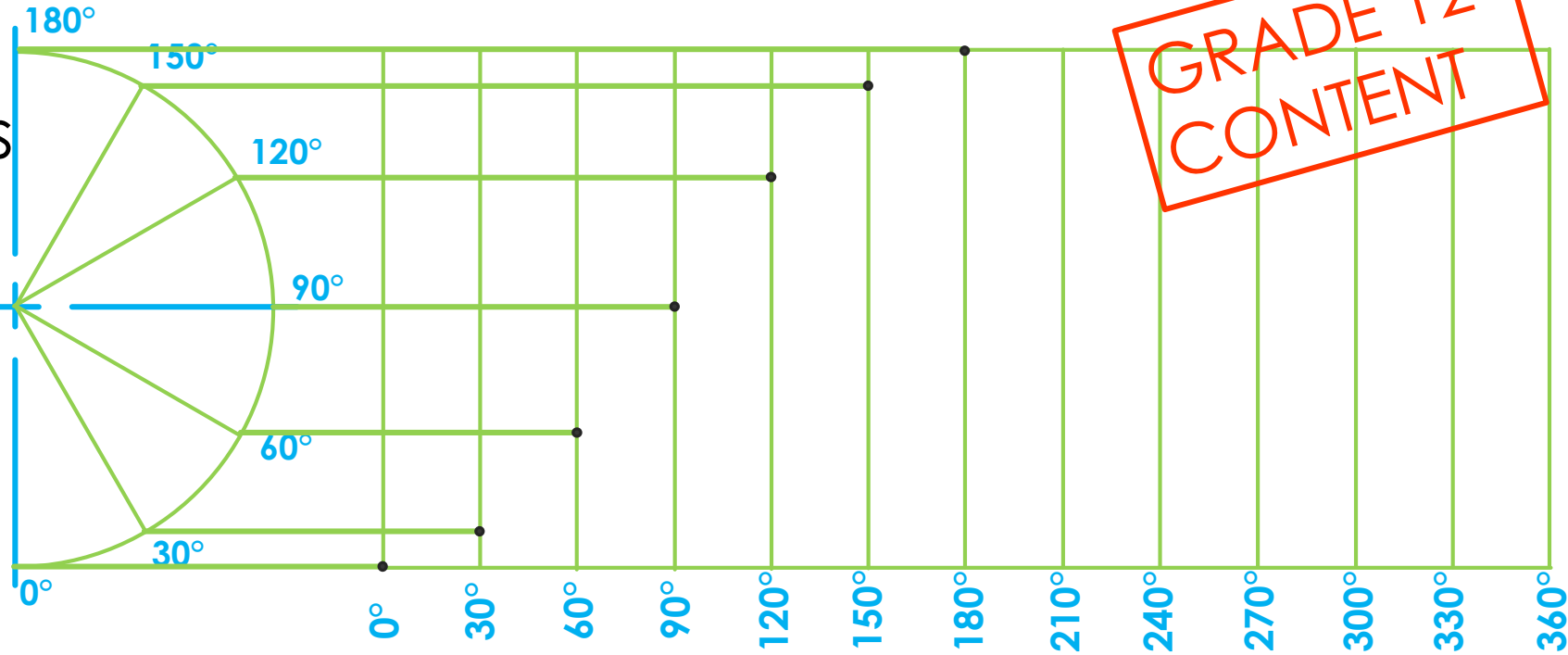
Displacement graph
Scale 10mm = 30°

Loci of a CAM: General information

- There are three different type of movements:
 - Uniform movement
 - Harmonic movement (grade 12 content)
 - Acceleration and retardation movement (grade 12 content)

Loci of a CAM: HARMONIC MOVEMENT

- 0° - 180° :
Rise by means of **Harmonic movement**
- 180° - 360° :
Move to original position by means of **Uniform movement**

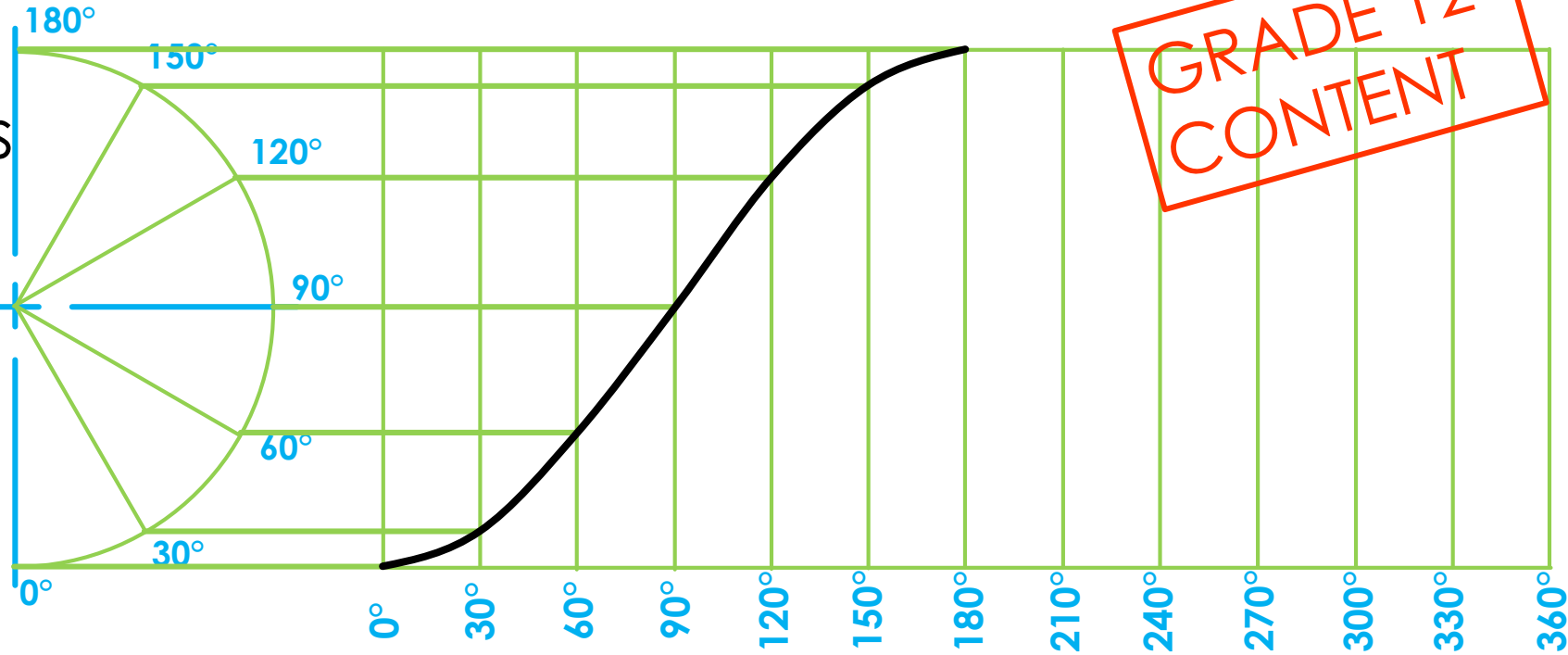


Displacement graph
Scale 10mm = 30°

Vertical scale 1:1

Loci of a CAM: HARMONIC MOVEMENT

- 0° - 180° :
Rise by means of **Harmonic movement**
- 180° - 360° :
Move to original position by means of **Uniform movement**



Displacement graph
Scale 10mm = 30°

Vertical scale 1:1

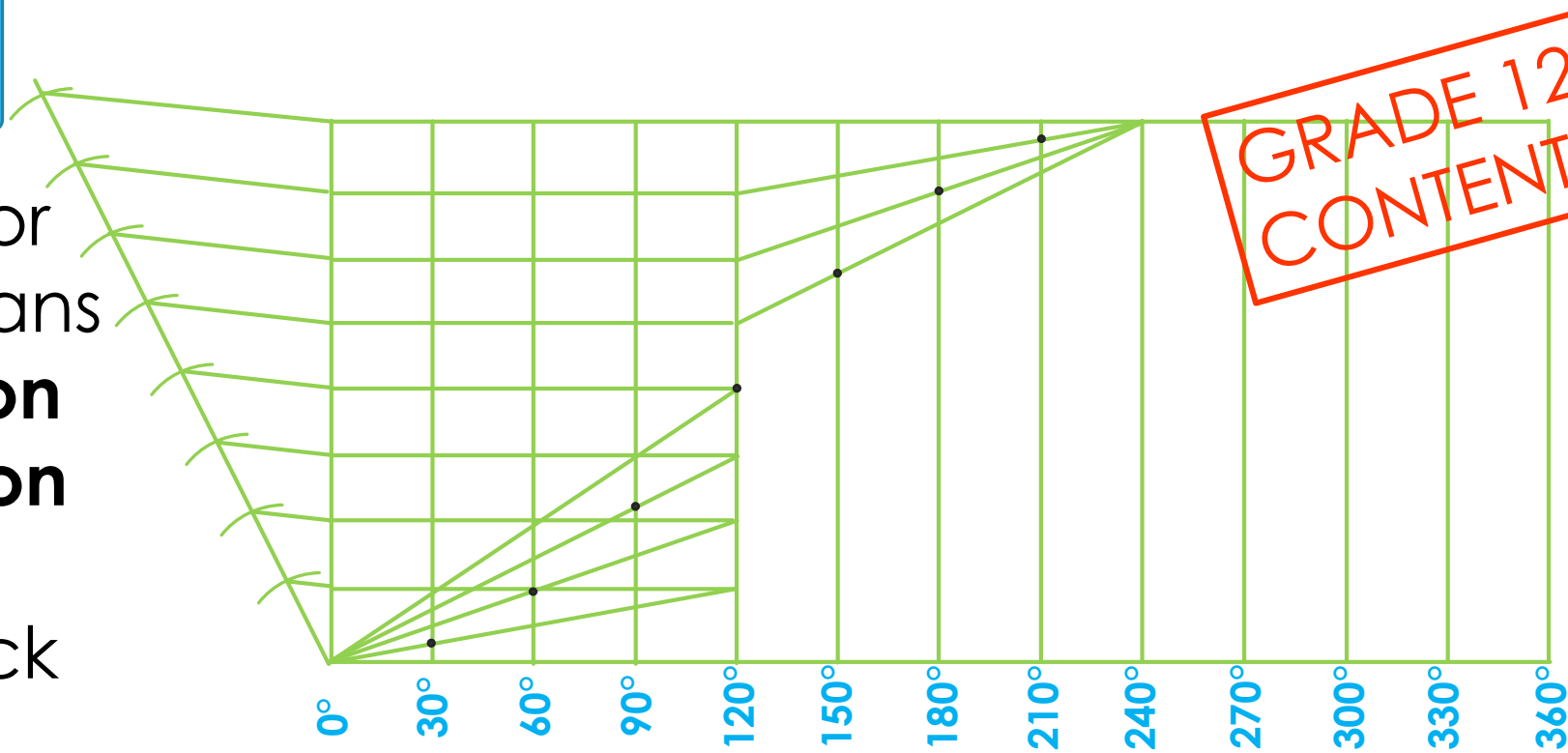
Loci of a CAM: General information

- There are three different type of movements:
 - Uniform movement
 - Harmonic movement (grade 12 content)
 - Acceleration and retardation movement (grade 12 content)

Loci of a CAM: ACCELERATION & RETARDATION MOVEMENT

Equal number

- 0° - 240° : Rise for 50mm by means of **acceleration and retardation movement**
- 240° - 360° : Back to original position by means of **uniform motion**



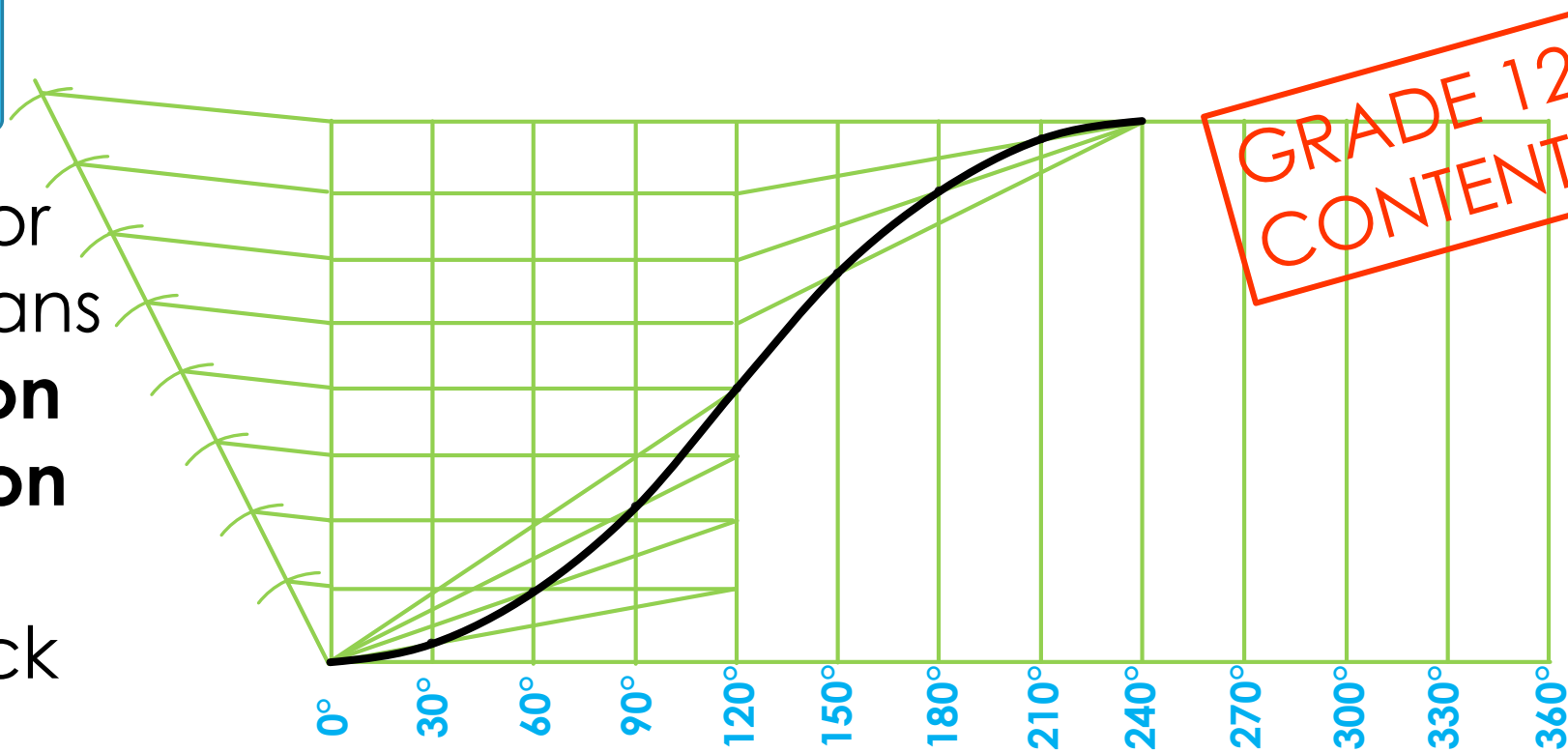
Displacement graph
Scale 10mm = 30°

Vertical scale 1:1

Loci of a CAM: ACCELERATION & RETARDATION MOVEMENT

Equal number

- 0° - 240° : Rise for 50mm by means of **acceleration and retardation movement**
- 240° - 360° : Back to original position by means of **uniform motion**

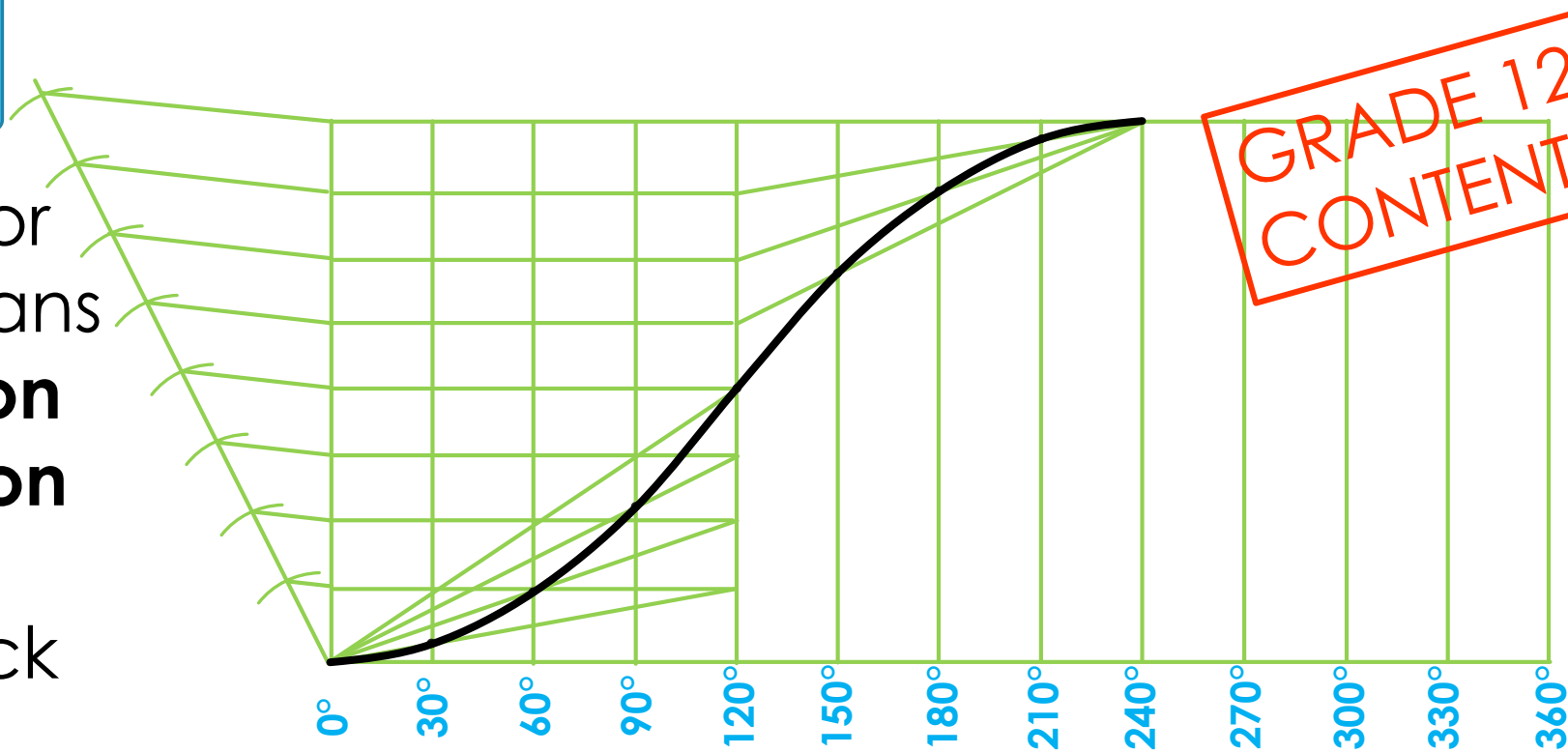


Displacement graph
Scale 10mm = 30°

Loci of a CAM: ACCELERATION & RETARDATION MOVEMENT

Equal number

- 0° - 240° : Rise for 50mm by means of **acceleration and retardation movement**
- 240° - 360° : Back to original position by means of **uniform motion**



Displacement graph
Scale 10mm = 30°