

# EGD Grade 10

## Geometric Constructions

### Dividing a line into a given number of equal parts

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# Geometric Constructions

Question

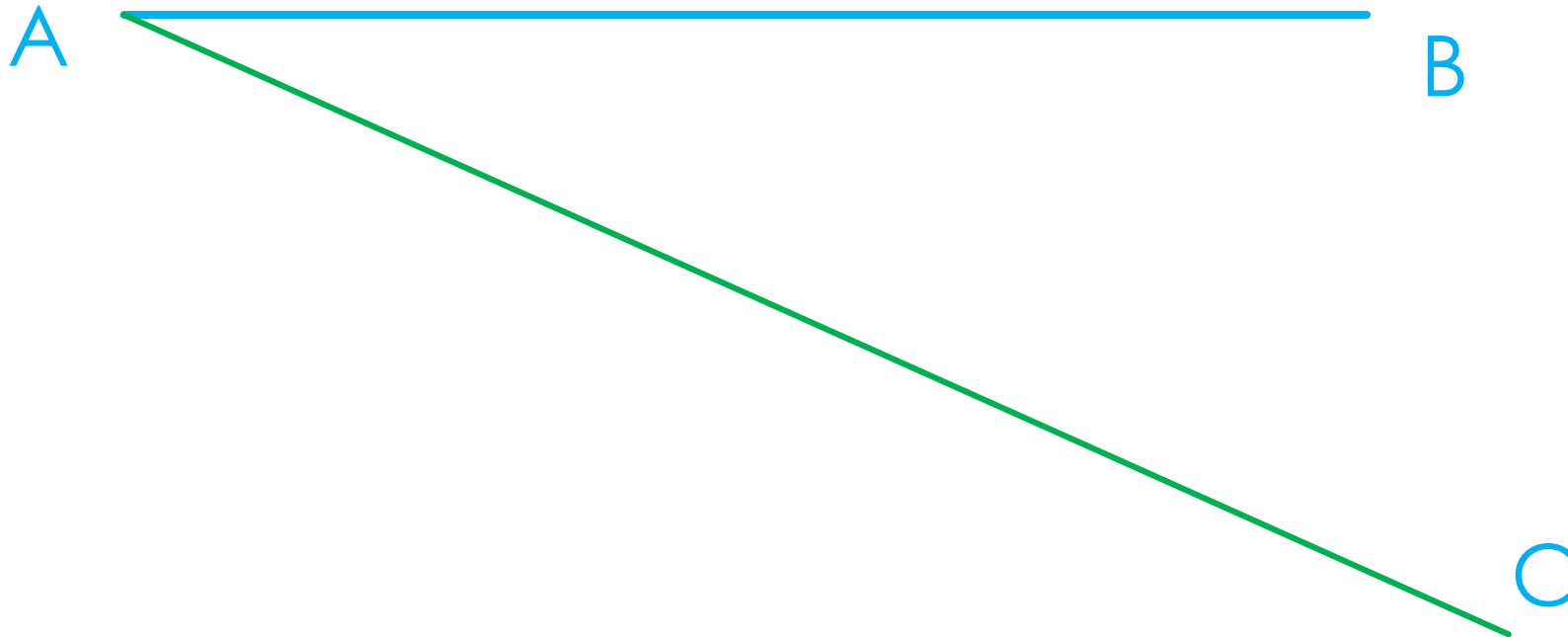
- By means of construction, divide line segment AB into five (5) equal parts



# Geometric Constructions

Step 1

- **Question:** Divide line segment AB into five (5) equal parts
- From the given point A, draw with an acute angle, line segment AC in the direction of point B



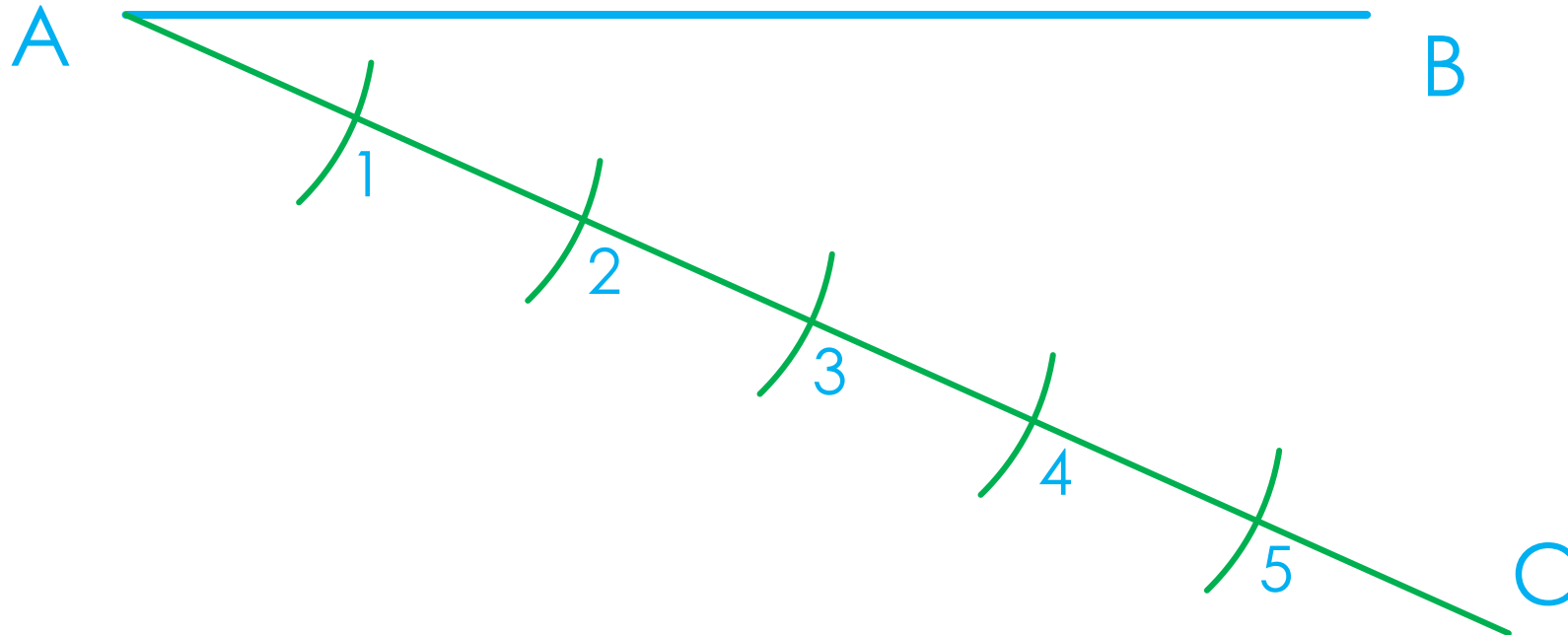
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# Geometric Constructions

Step 2

- **Question:** Divide line segment AB into five equal parts
- With your compass set to a comfortable size, strike five (5) equally sized arcs on line segment AC



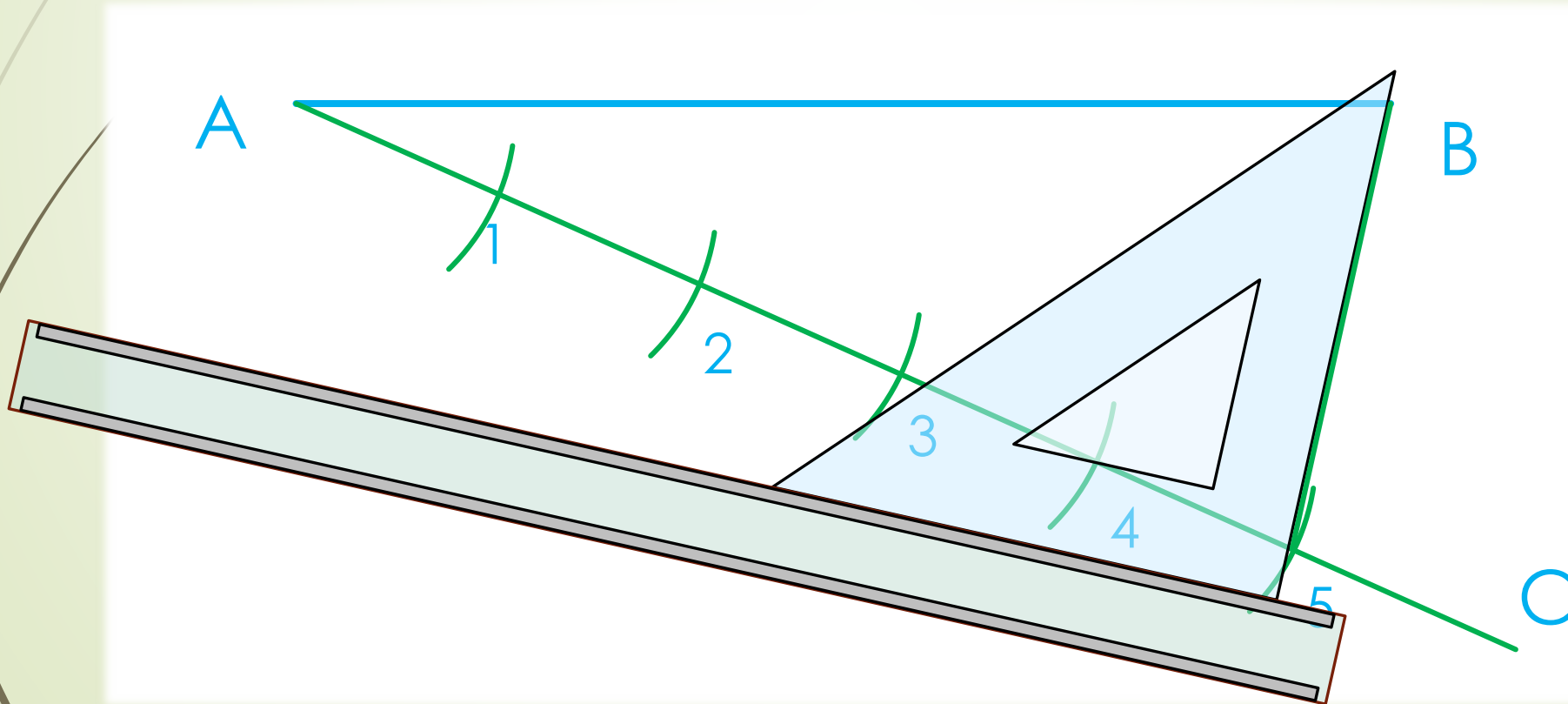
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# Geometric Constructions

Step 3

- **Question:** Divide line segment AB into five equal parts
- Join the intersection point of the last arc (point 5) to end B on line segment AB



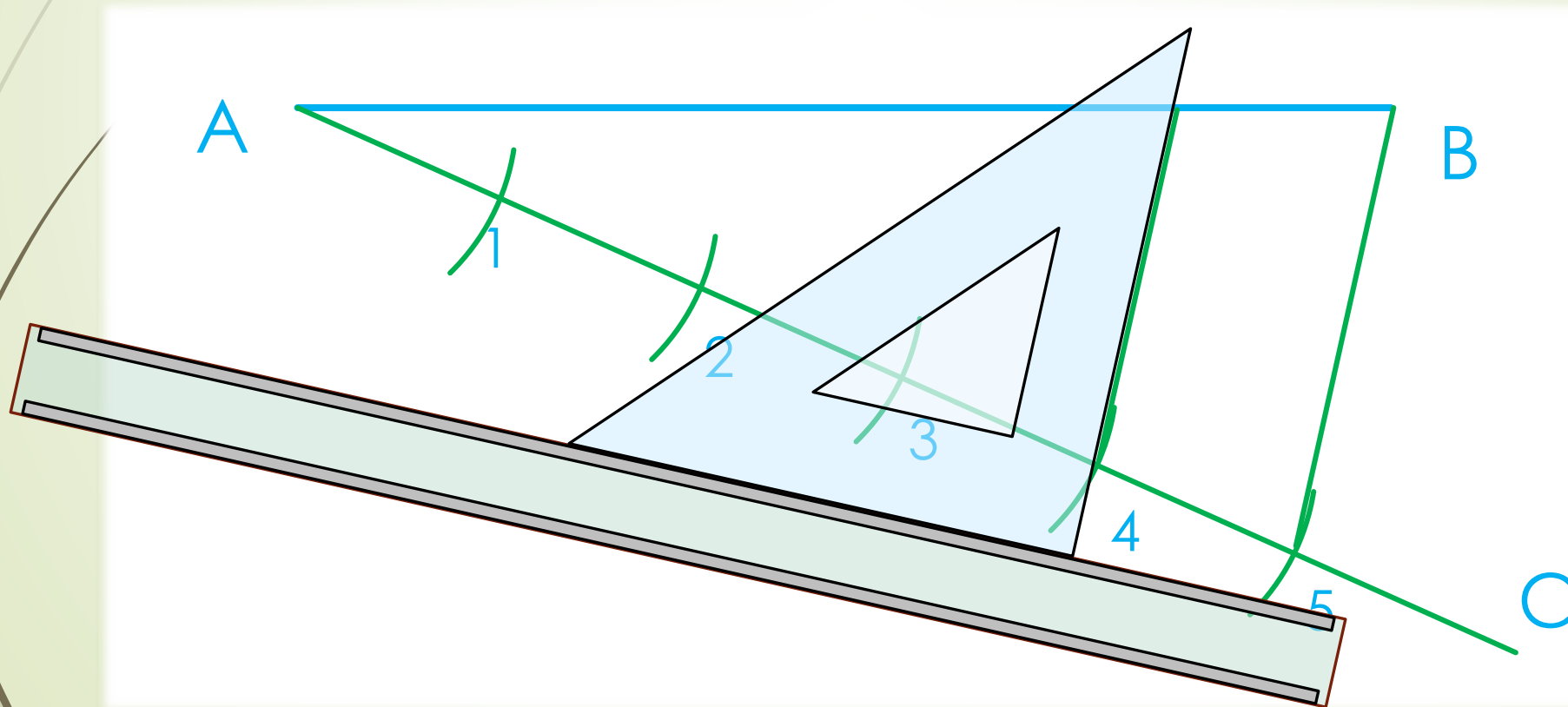
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# Geometric Constructions

Step 4

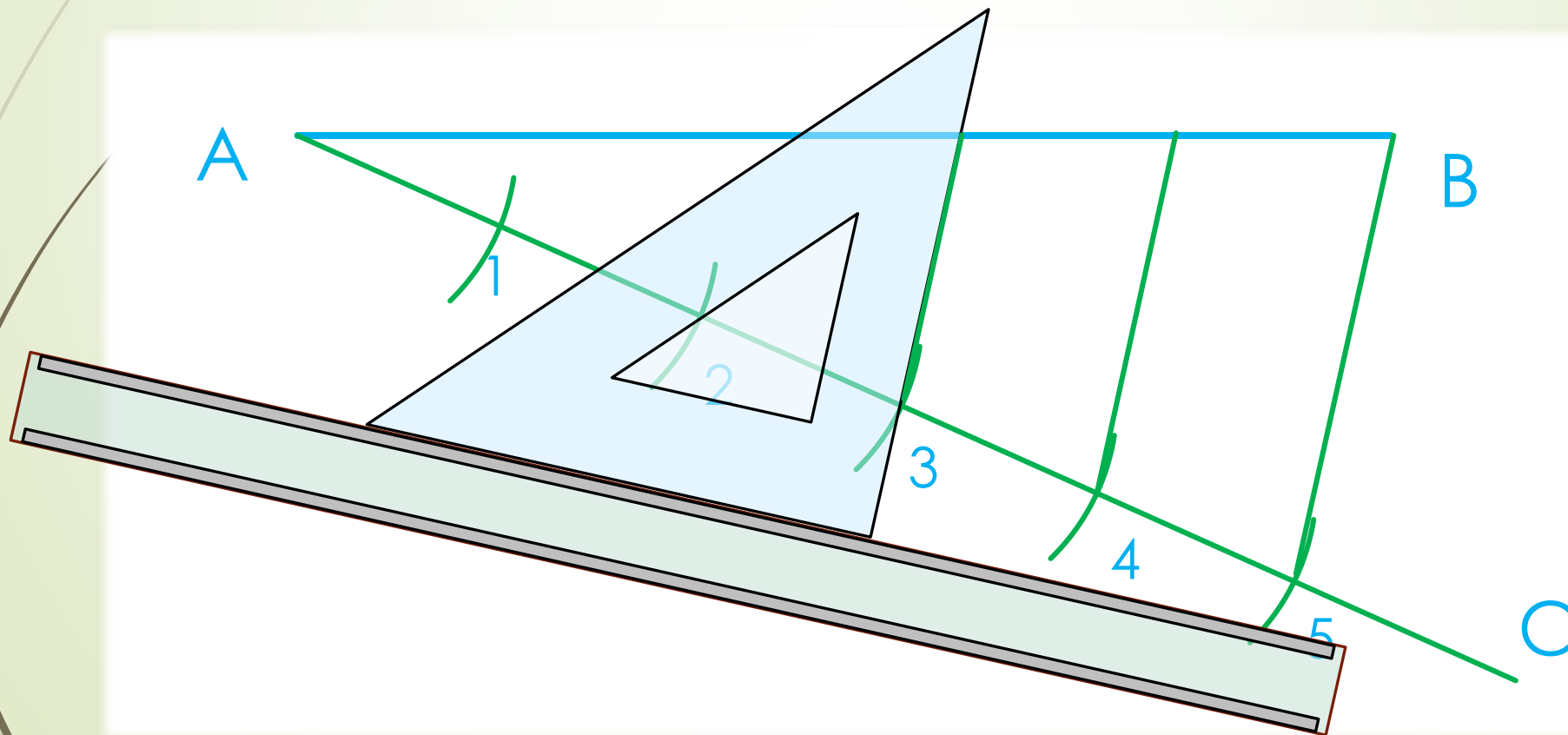
- **Question:** Divide line segment AB into five equal parts
- Use your ruler to slide your set-square to join intersection points of arc 4 with line segment AB



# Geometric Constructions

Step 5

- **Question:** Divide line segment AB into five equal parts
- Use your ruler to slide your set-square to join intersection points of arc 3 with line segment AB



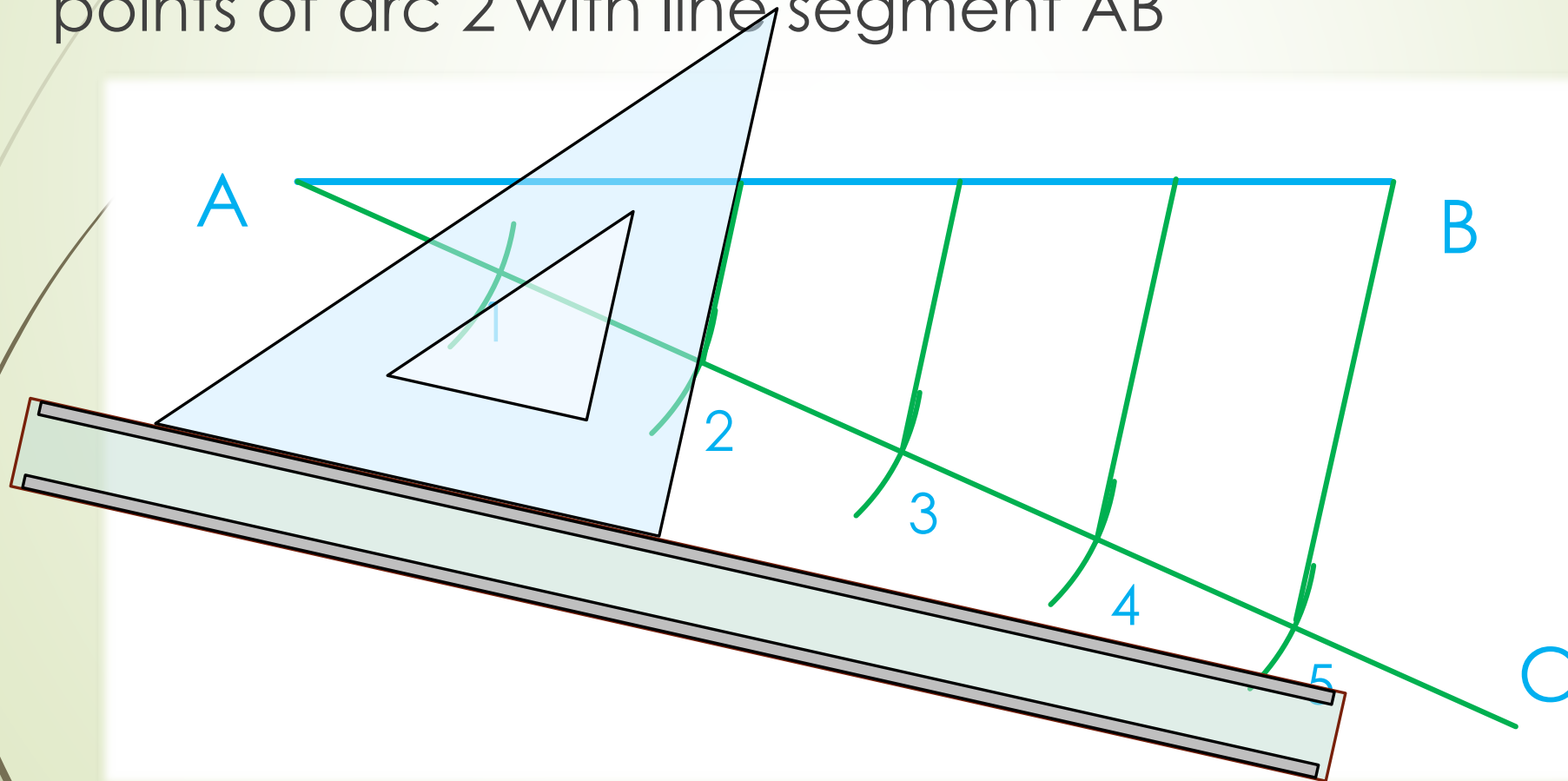
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# Geometric Constructions

Step 6

- **Question:** Divide line segment AB into five equal parts
- Use your ruler to slide your set-square to join intersection points of arc 2 with line segment AB



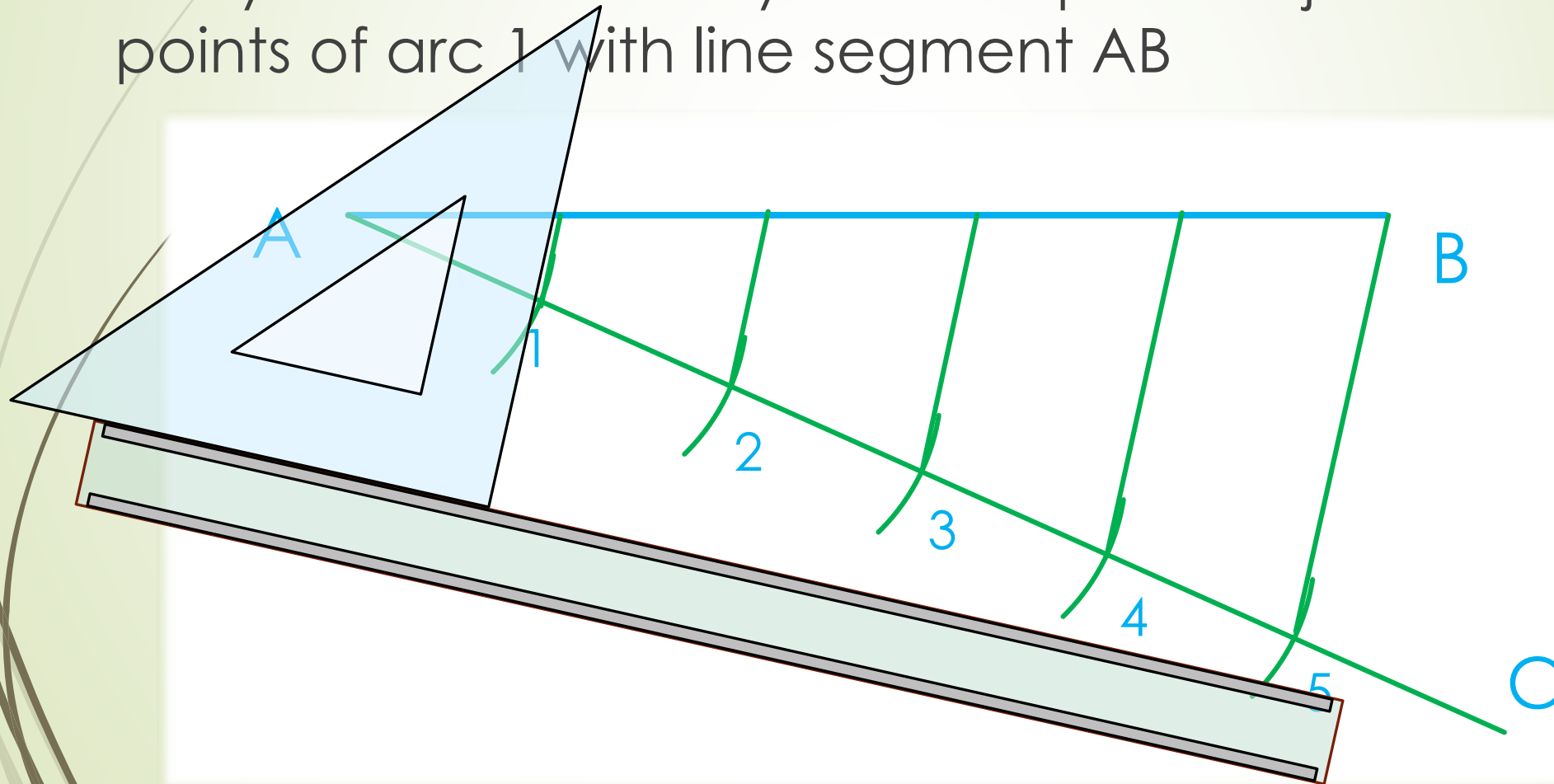
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# Geometric Constructions

Step 7

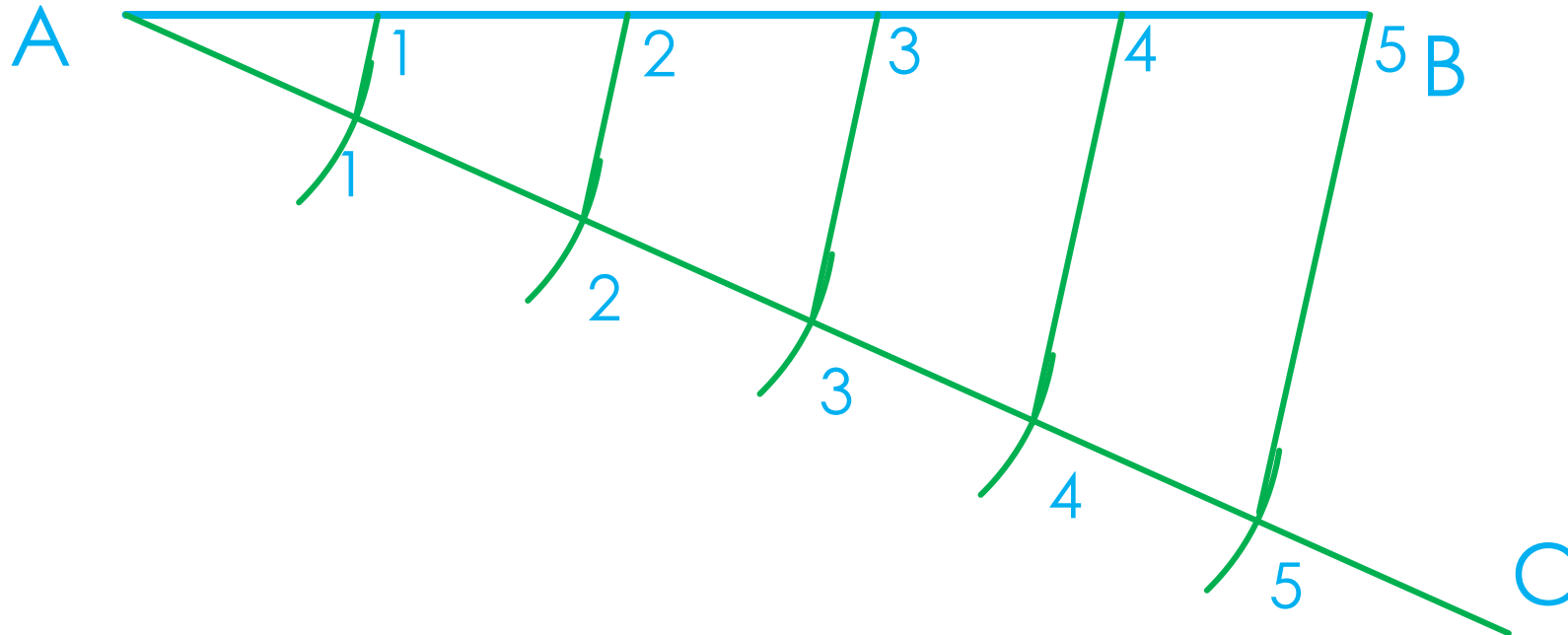
- **Question:** Divide line segment AB into five equal parts
- Use your ruler to slide your set-square to join intersection points of arc 1 with line segment AB



# Geometric Constructions

Answer

- **Question:** Divide line segment AB into five equal parts
- Line segment AB will be now divided into five (5) equal parts



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# Geometric Constructions

Task 1.5.4

- On the prepared A3 drawing sheet (Task 1.5.3), draw a line segment AB of 108 mm in length.
- **Question: Divide line segment AB into 7 equal part by means of construction.**
- Show all construction lines.
- Name this task 1.5.4