

EGD Grade 10

Geometric Constructions

Tangent to circle

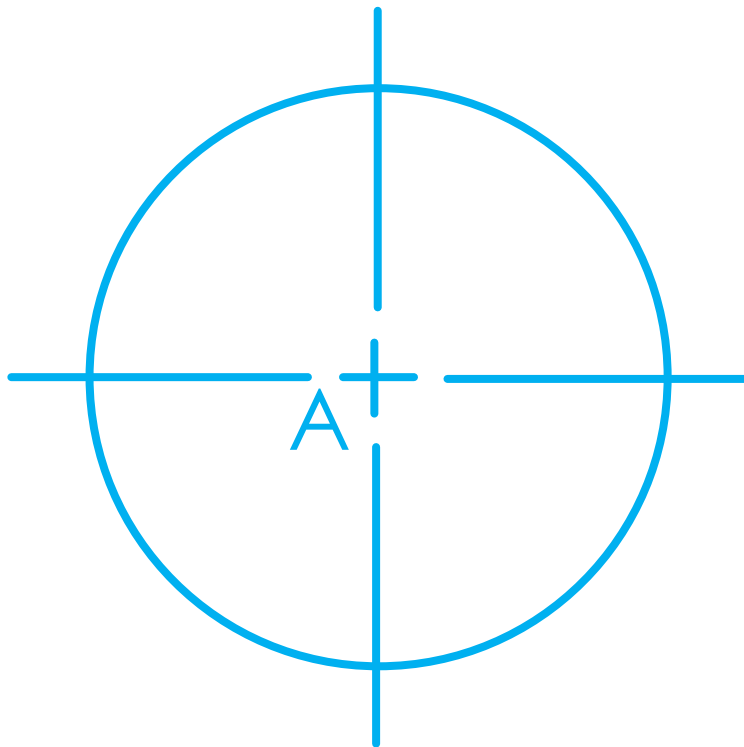
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Geometric Constructions

Question

- By means of construction, draw a tangent to circle (A) from the given point (B) outside the circle



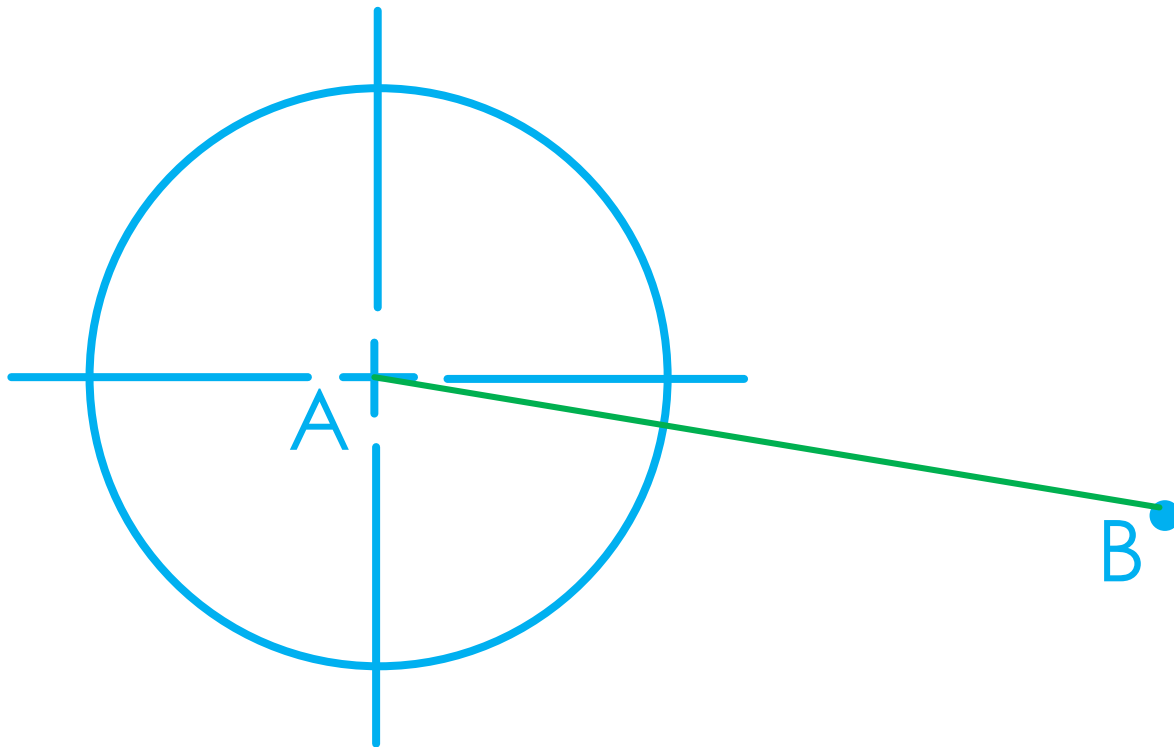
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Geometric Constructions

Step 1

- **Question:** Draw a tangent to a circle from a given point outside the circle
- Join the centre of the circle with point B



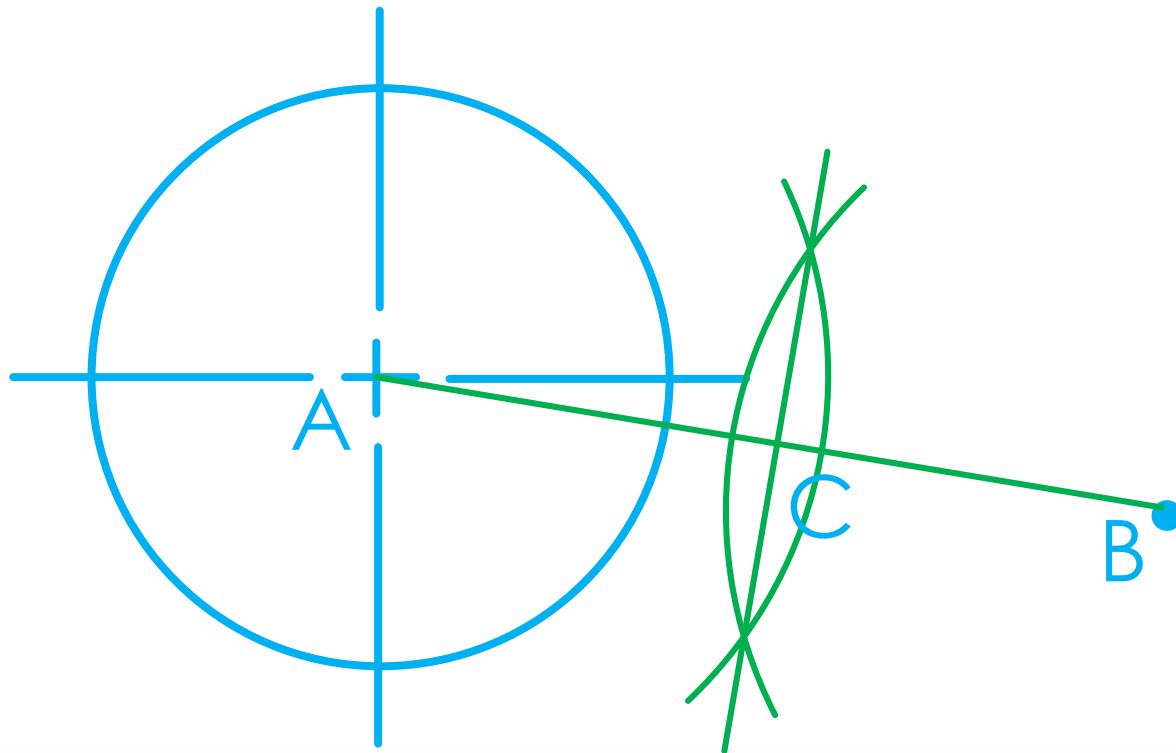
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Step 2

- **Question:** Draw a tangent to a circle from a given point outside the circle
- Determine the bisecting point (C) of line segment AB



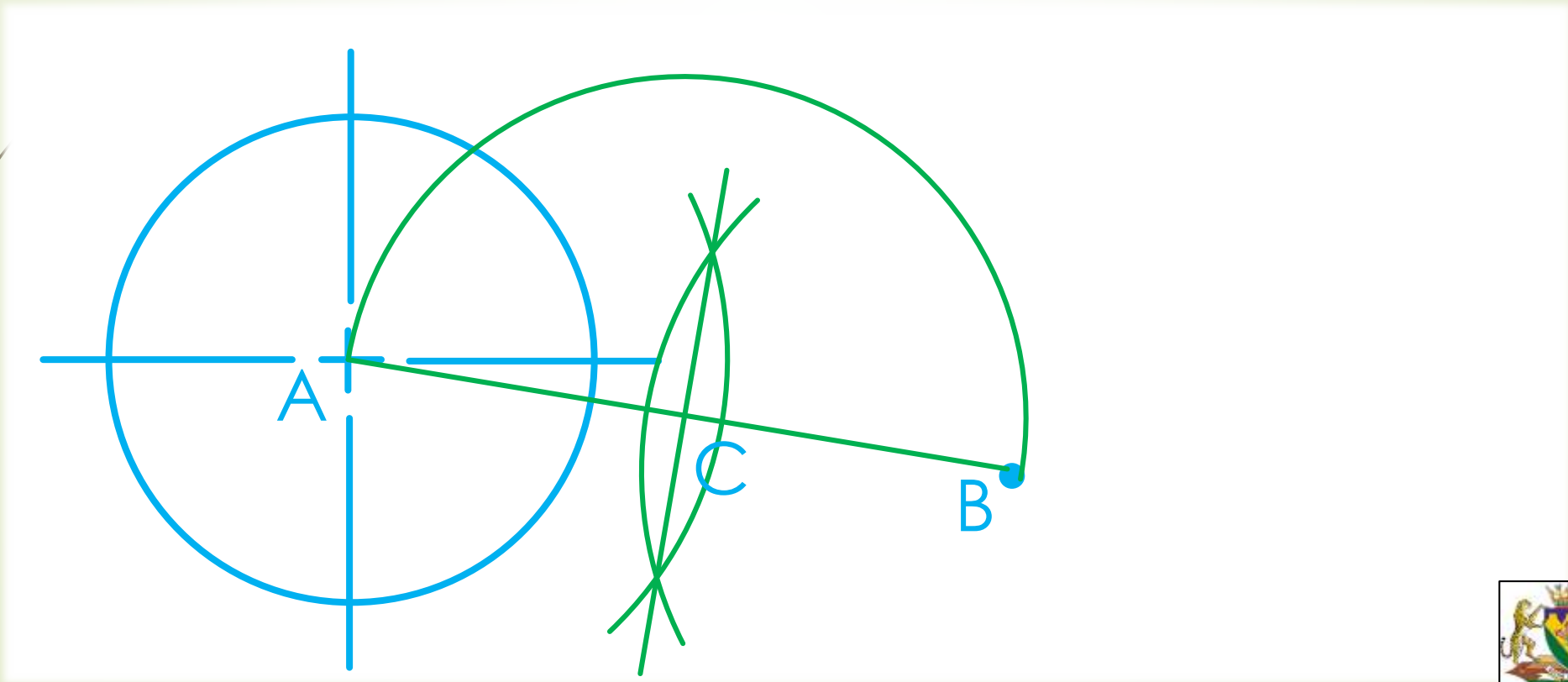
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Step 3

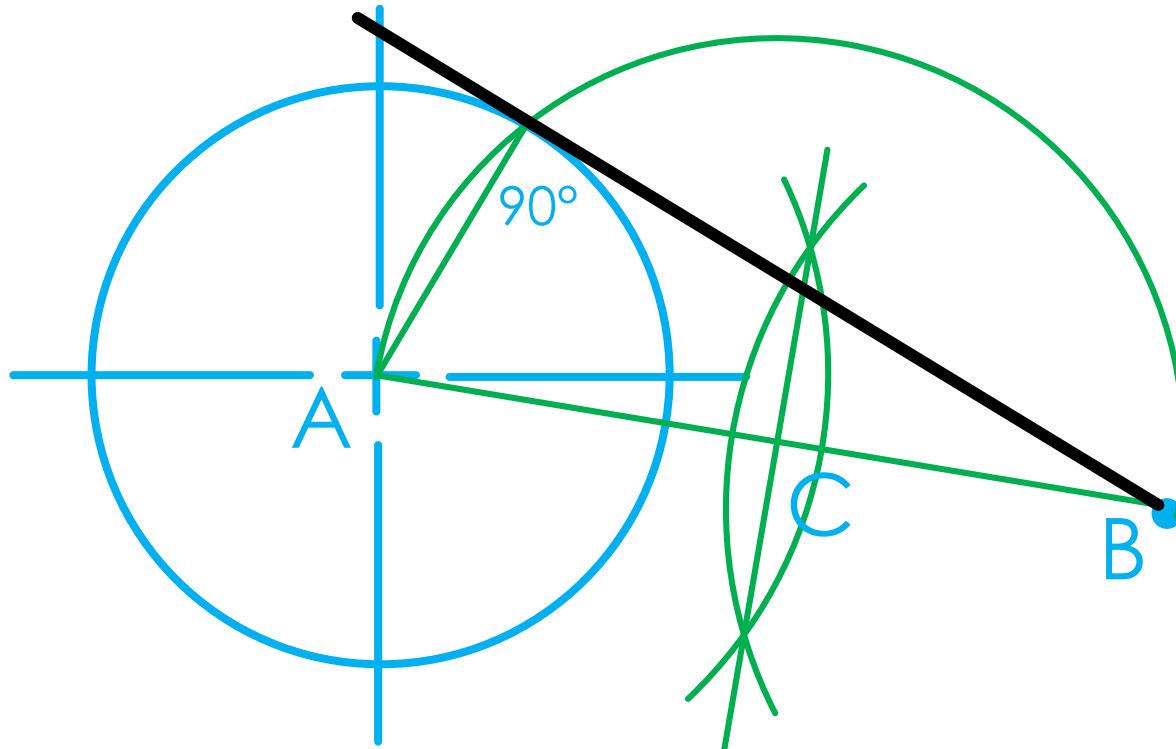
- **Question:** Draw a tangent to a circle from a given point outside the circle
- From point C draw a semi-circle



Geometric Constructions

Step 4

- **Question:** Draw a tangent to a circle from a given point outside the circle
- The point of tangency is where the given circle (A) and the semi-circle C intersect



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Geometric Constructions

Task 1.6.1

- On the prepared A3 drawing sheet (Task 1.5.3), draw a circle (A) with a radius of 40 mm and point (B) at 30° a 100 mm to the left of point A.
- **Question: Draw a tangent to a circle from a given point outside the circle.**
- Show all construction lines.
- Name this task 1.6.1