



# EGD Grade 10

## Geometric Constructions

### Construct a $90^\circ$ angle from a point on a line

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# Geometric Constructions

Question

- Draw a perpendicular line from point A on line segment BC by means of construction



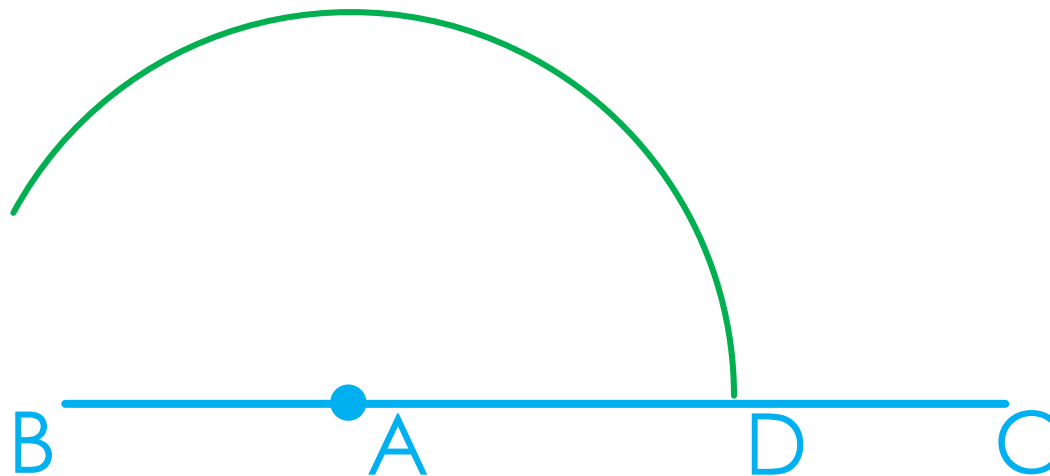
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# Geometric Constructions

Step 1

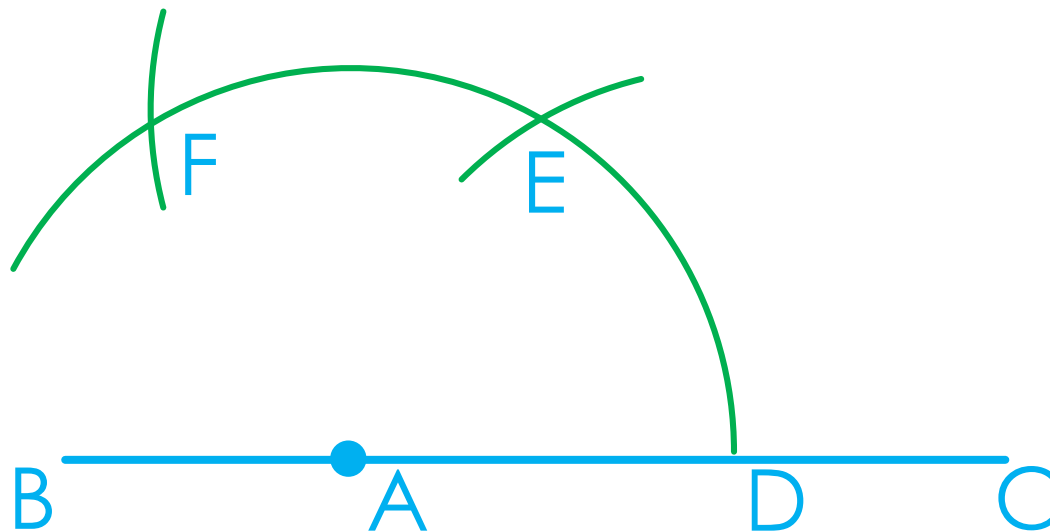
- **Question:** Perpendicular line from point A
- Draw an arc of any size from A to intersect line segment BC at D



# Geometric Constructions

Step 2

- **Question:** Perpendicular line from point A
- At the same size as arc AD, strike two similar sized arcs from intersection point D to intersect arc AD at E and F respectively



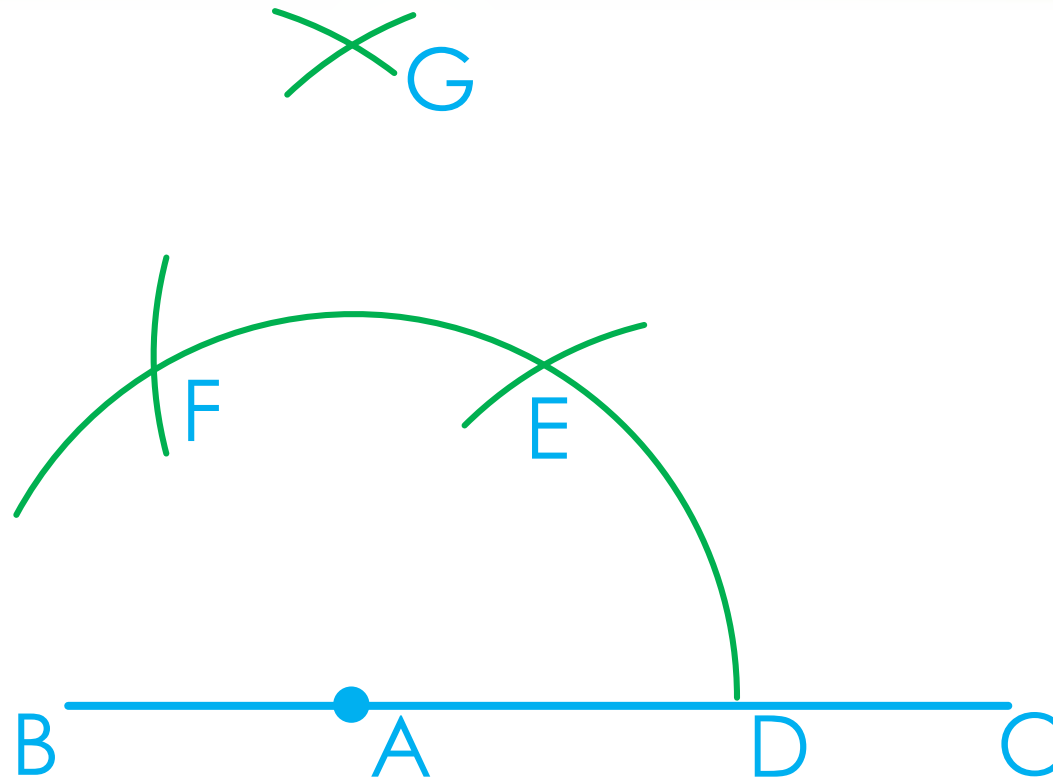
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# Geometric Constructions

Step 3

- **Question:** Perpendicular line from point A
- Strike two similar sized arcs from intersection point E and F respectively to intersect at G



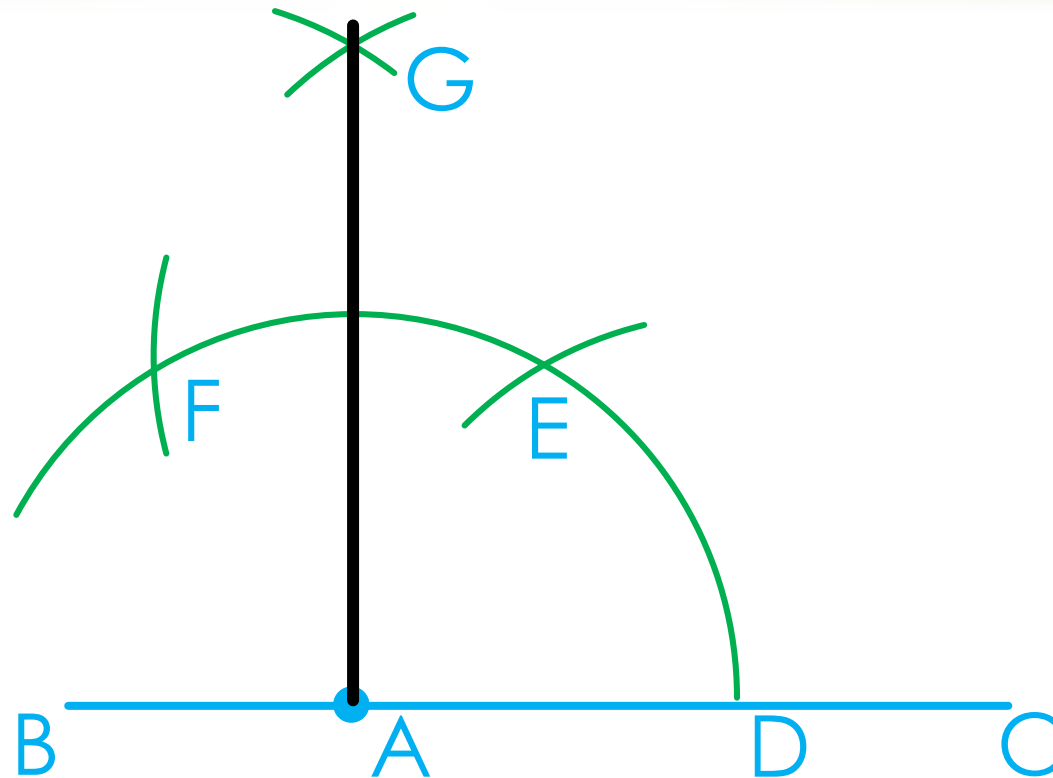
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# Geometric Constructions

Step 4

- **Question:** Perpendicular line from point A
- Join point A with the intersection point at G to complete the perpendicular line



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# Geometric Constructions

Task 1.4.2

- On the prepared A3 drawing sheet (Task 1.3.3), draw line segment AB (75mm in length).
- **Question:** Draw an angle of  $90^\circ$  from point A on line segment AB by means of construction.
- Show all construction lines.
- Name this task 1.4.2