Constructing an Ellipse

Concentric Circle Method

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Geometric Constructions

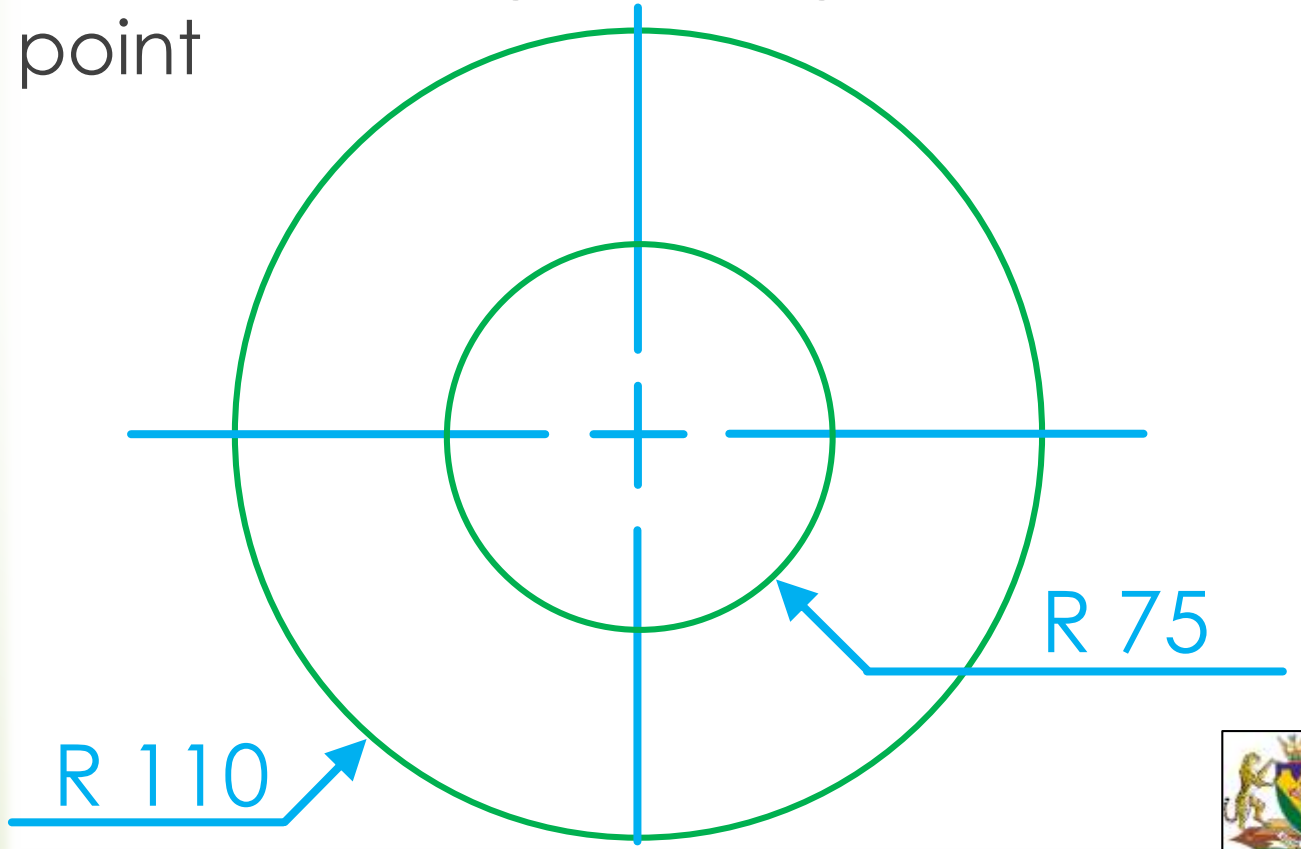
Question

- Construct an ellipse by means of the concentric circle method if the major axis is 110mm and the minor axis is 75 mm

Geometric Constructions

Step 1

- Question: Construct an ellipse by means of the concentric circle method
- Draw the two circles according to the given radii with a common centre point



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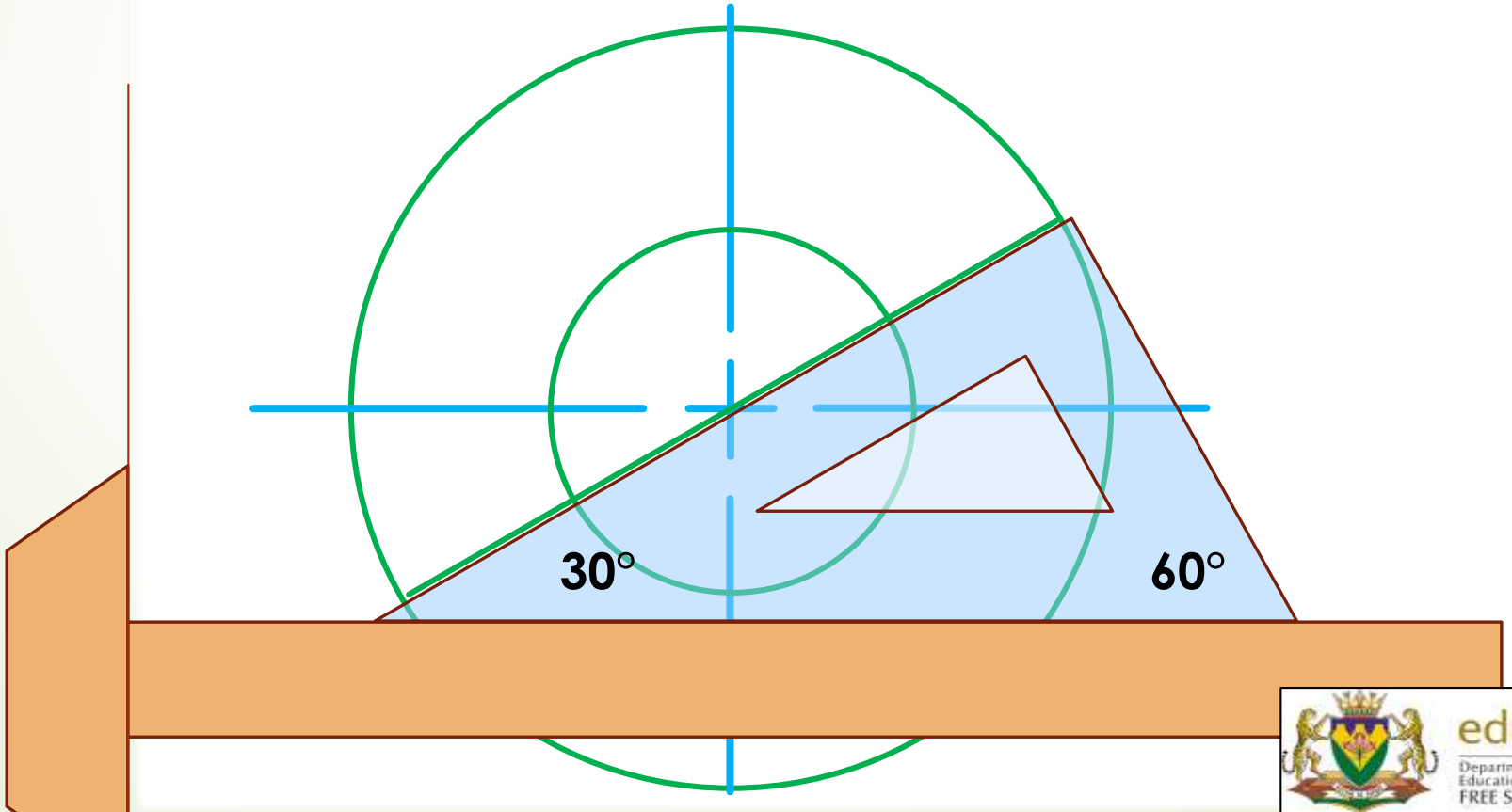
Geometric Constructions

Step 2

- Question: Construct an ellipse by means of the concentric circle method
- Divide the circle into twelve equal parts



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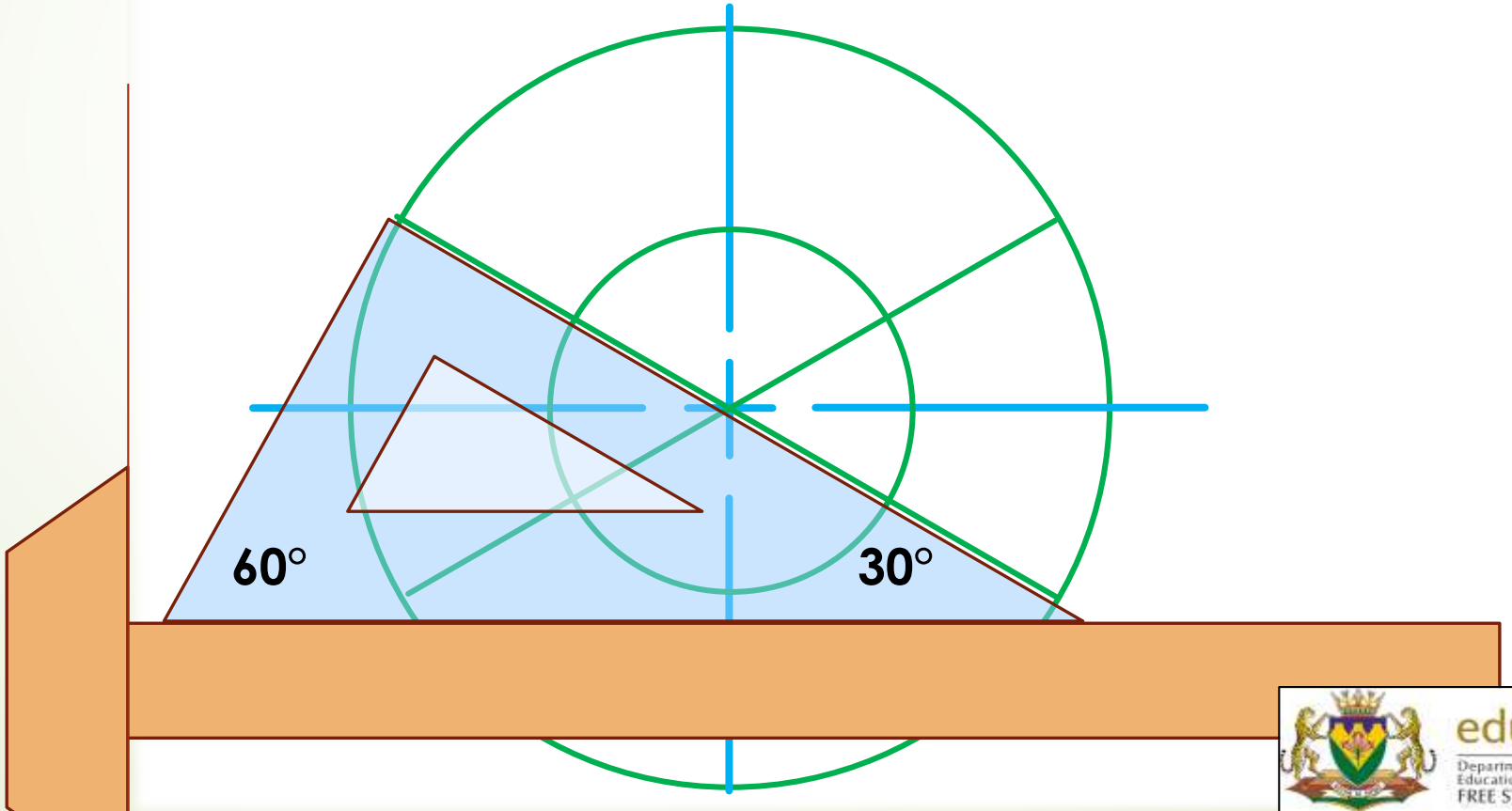
Geometric Constructions

Step 3

- Question: Construct an ellipse by means of the concentric circle method
- Divide the circle into twelve equal parts



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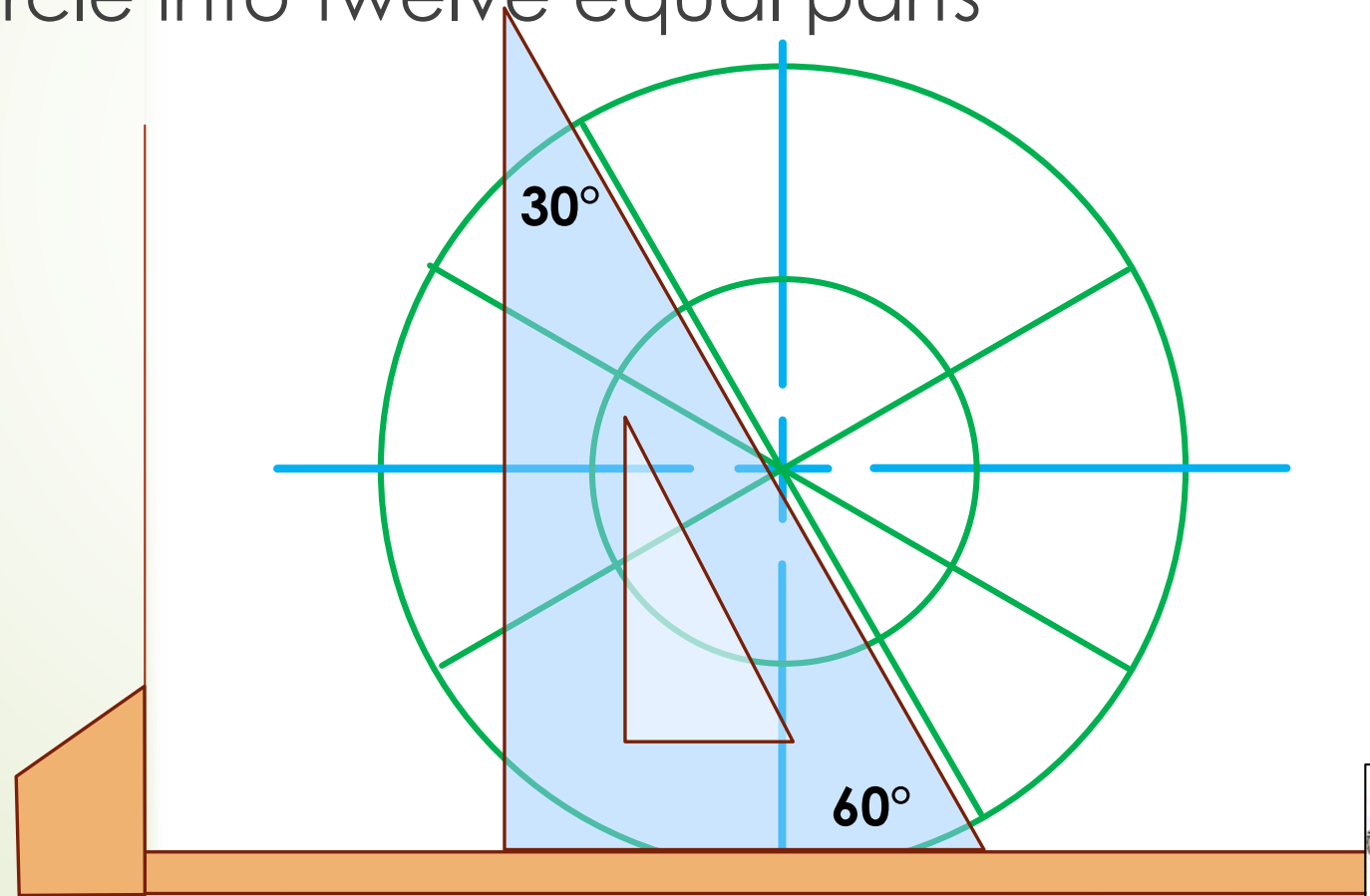
Geometric Constructions

Step 4

- Question: Construct an ellipse by means of the concentric circle method
- Divide the circle into twelve equal parts



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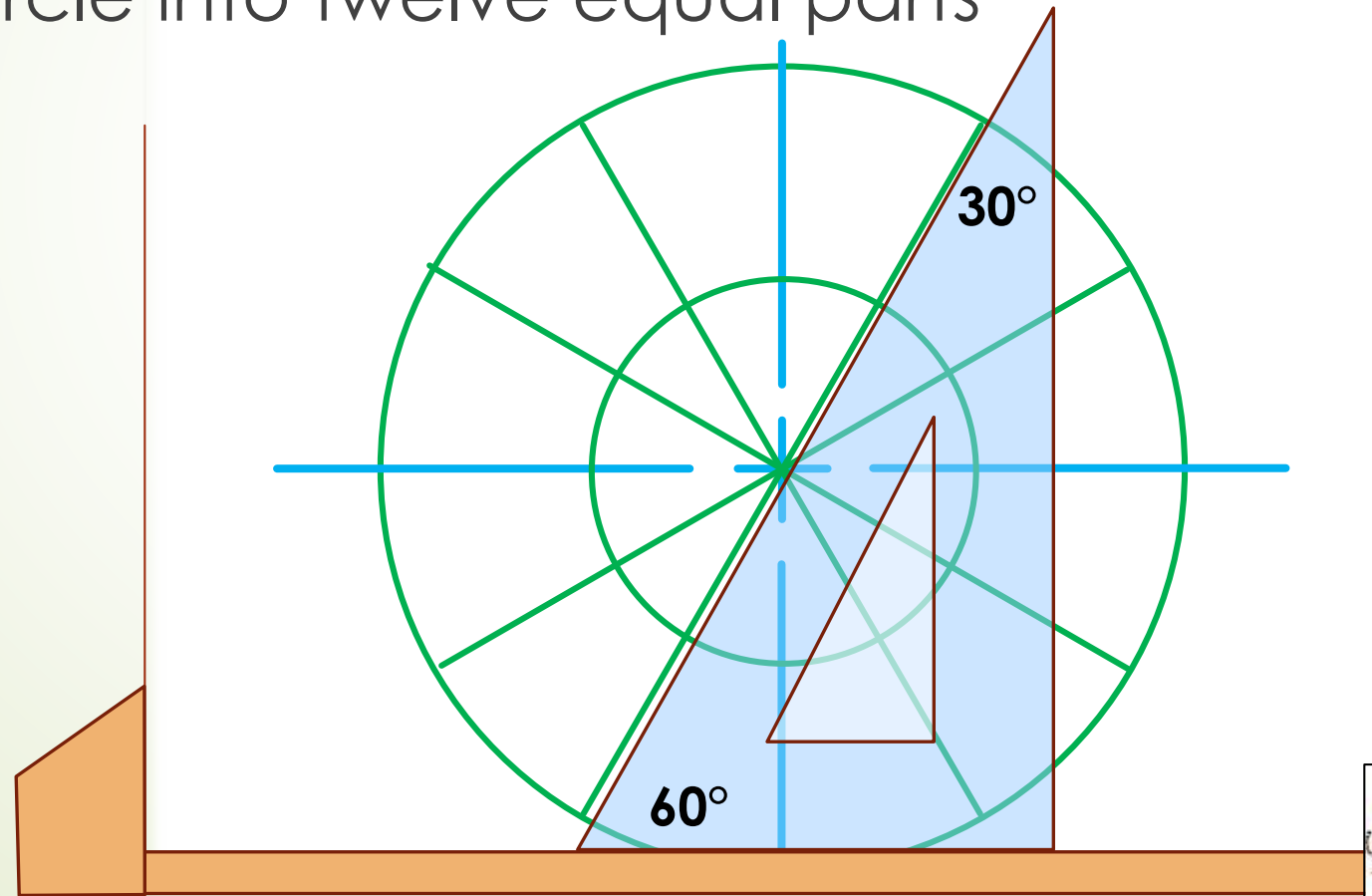
Geometric Constructions

Step 5

- Question: Construct an ellipse by means of the concentric circle method
- Divide the circle into twelve equal parts



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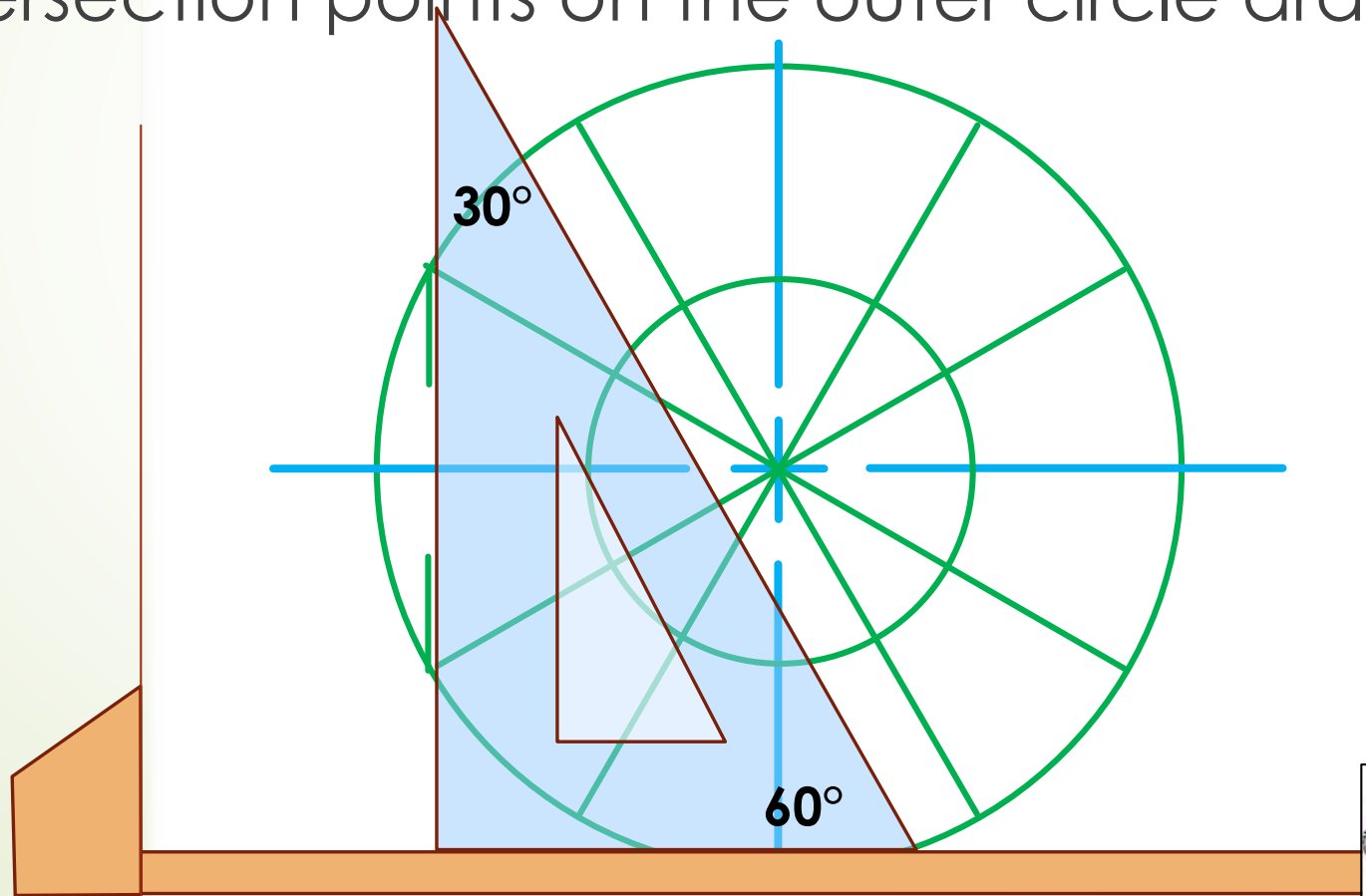
Geometric Constructions

Step 6

- Question: Construct an ellipse by means of the concentric circle method
- From the intersection points on the outer circle draw vertical lines



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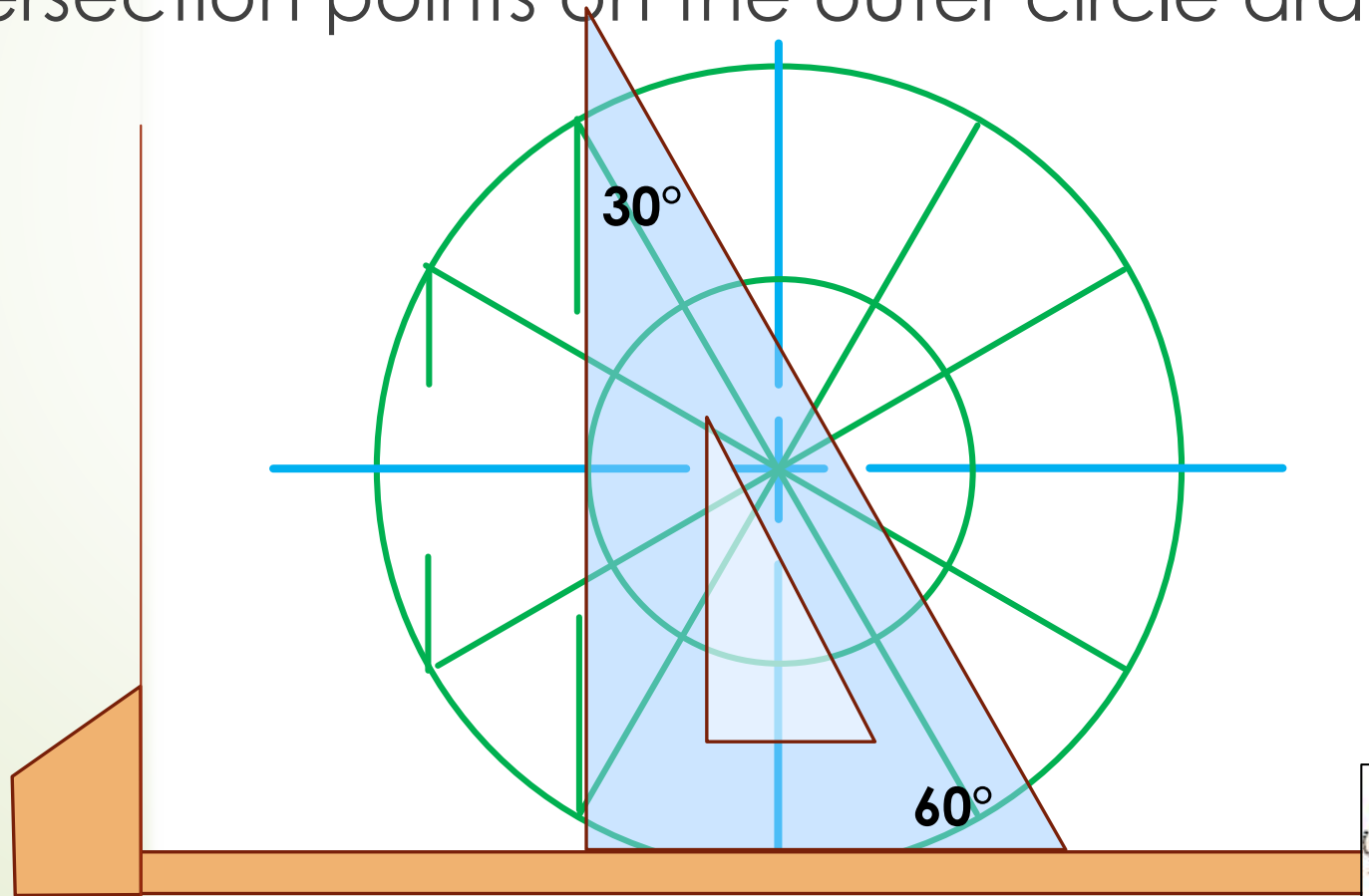
Geometric Constructions

Step 7

- Question: Construct an ellipse by means of the concentric circle method
- From the intersection points on the outer circle draw vertical lines



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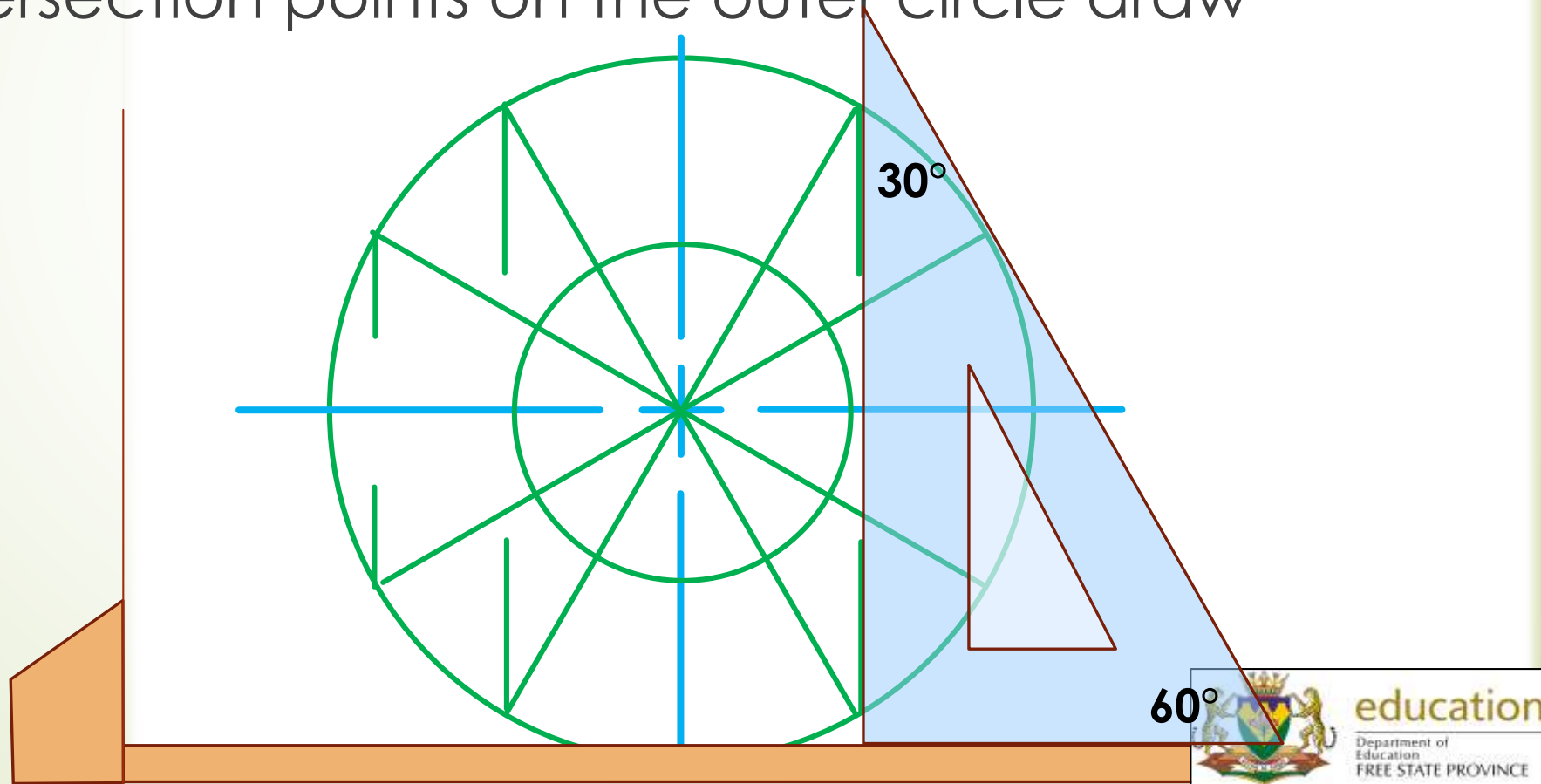
Geometric Constructions

Step 8

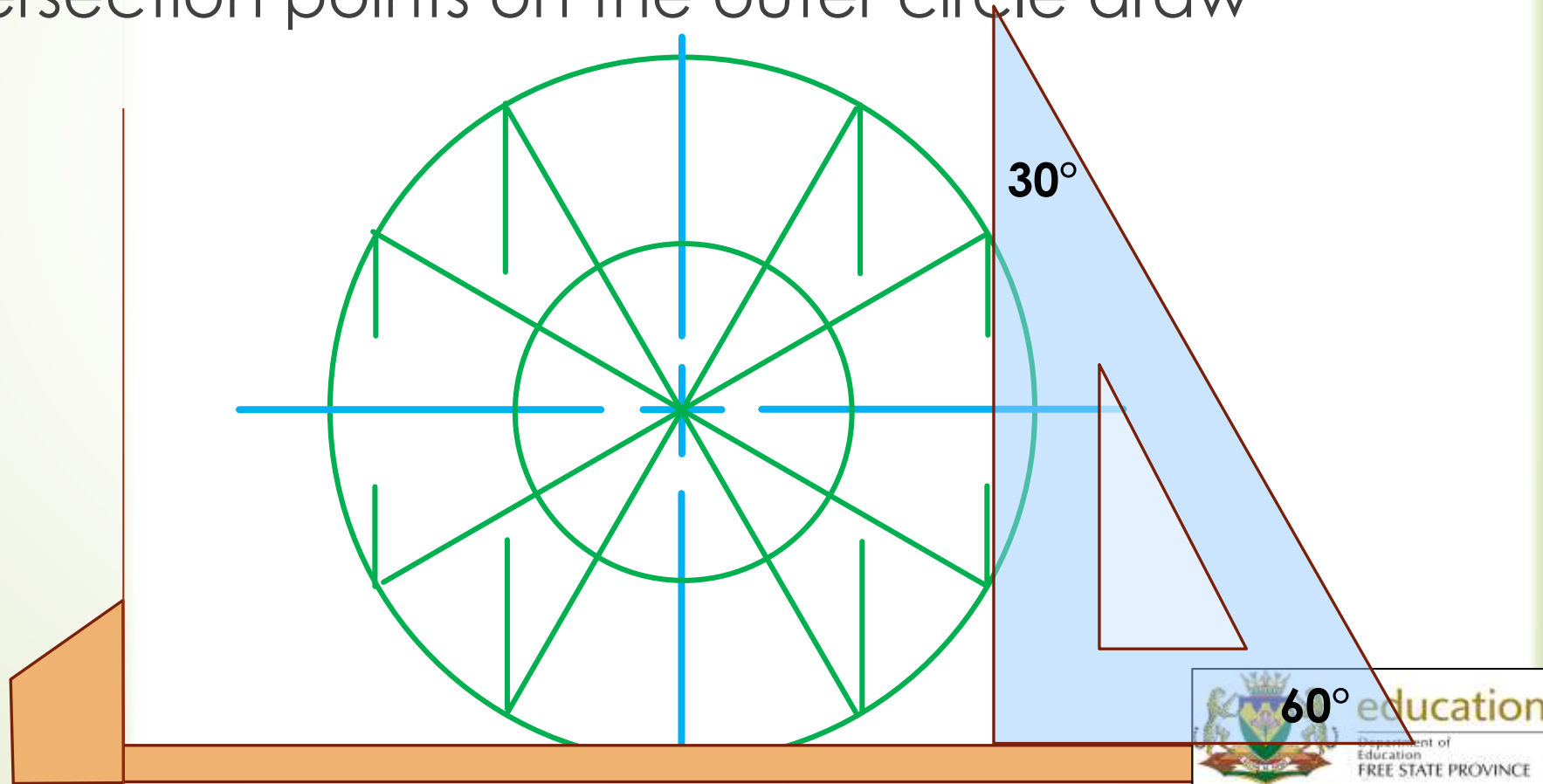
- Question: Construct an ellipse by means of the concentric circle method
- From the intersection points on the outer circle draw vertical lines



Geometric Constructions

Step 9

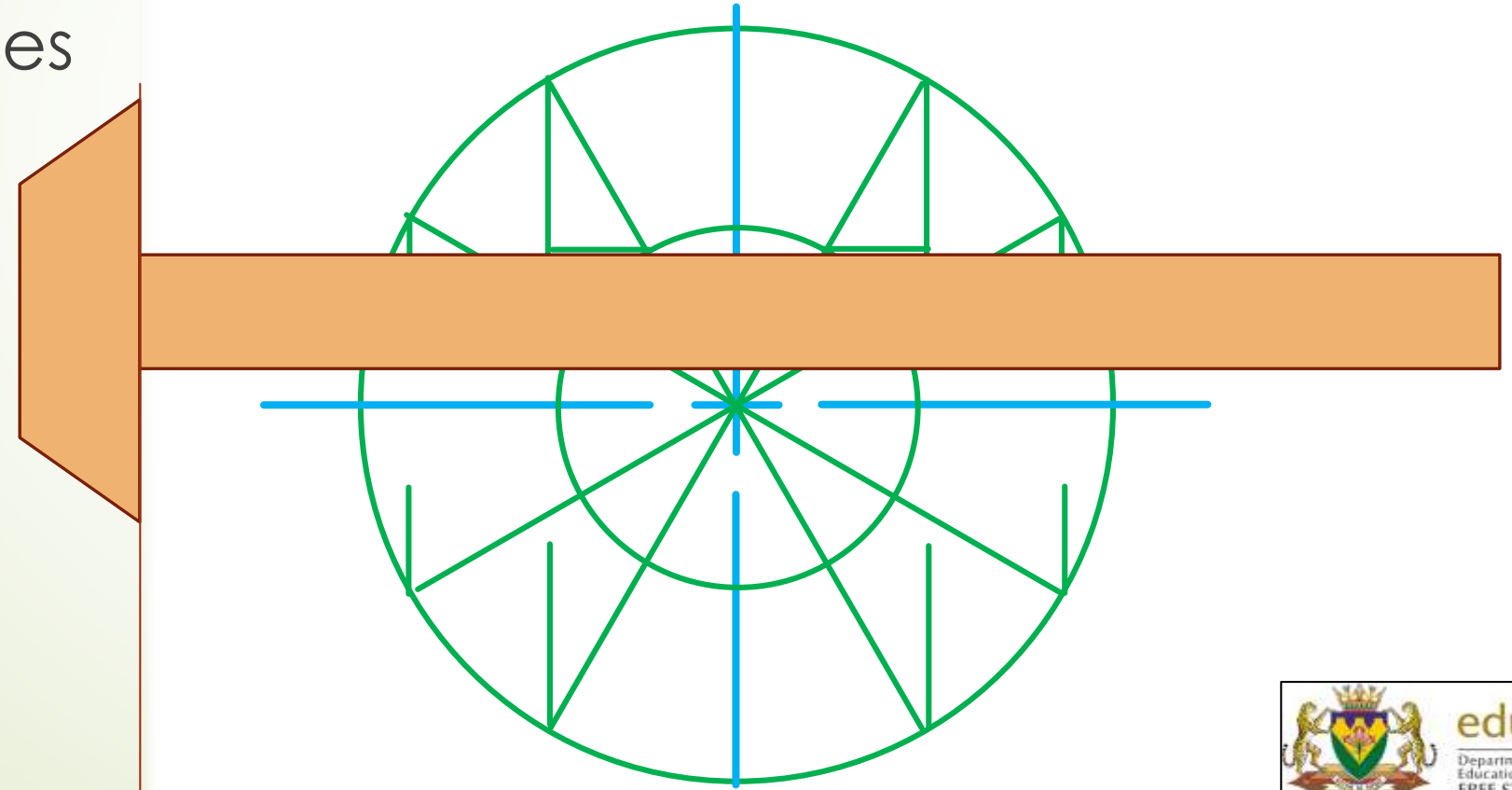
- Question: Construct an ellipse by means of the concentric circle method
- From the intersection points on the outer circle draw vertical lines



Geometric Constructions

Step 10

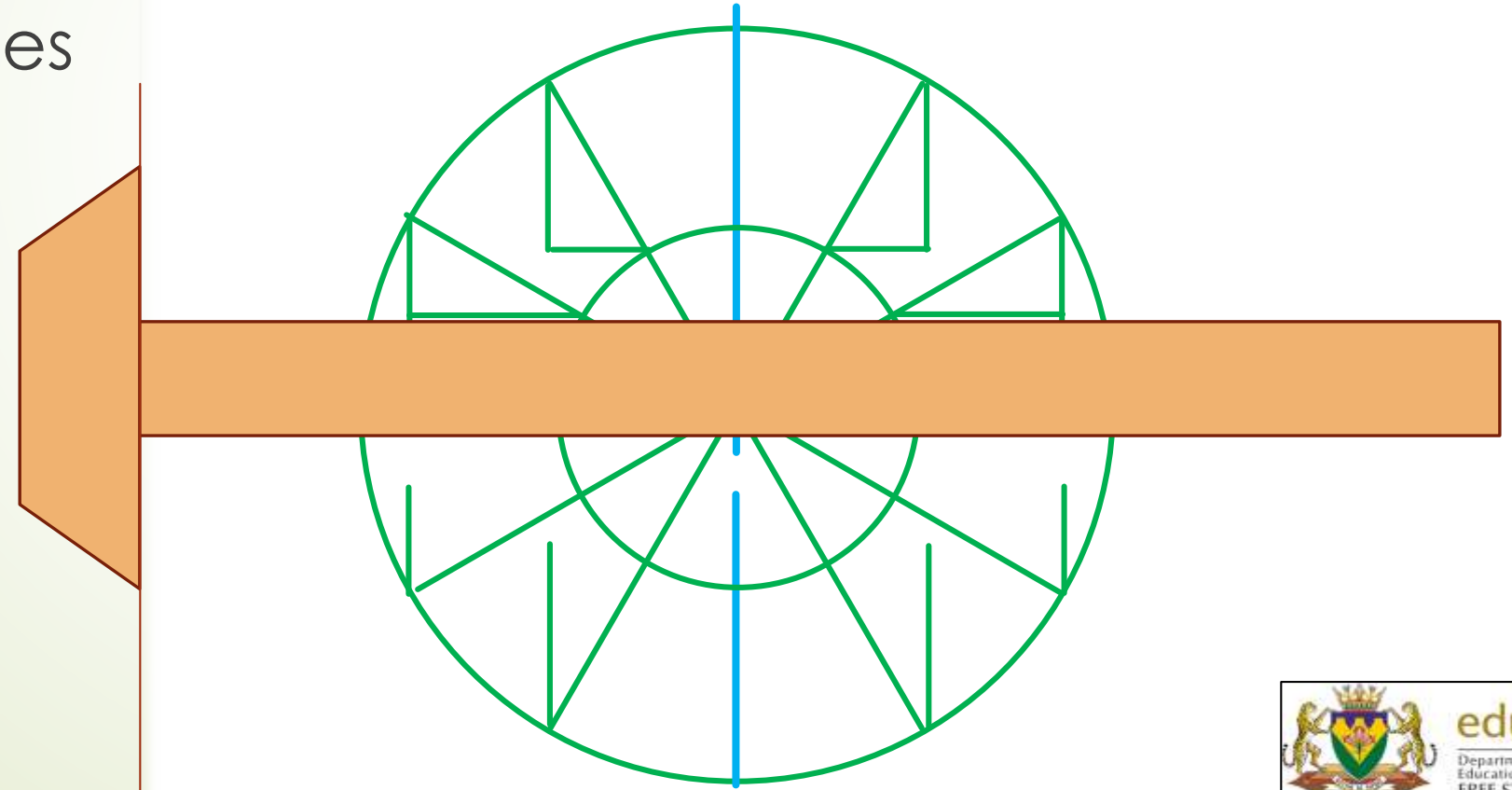
- Question: Construct an ellipse by means of the concentric circle method
- From the intersection points on the inner circle draw horizontal lines



Geometric Constructions

Step 11

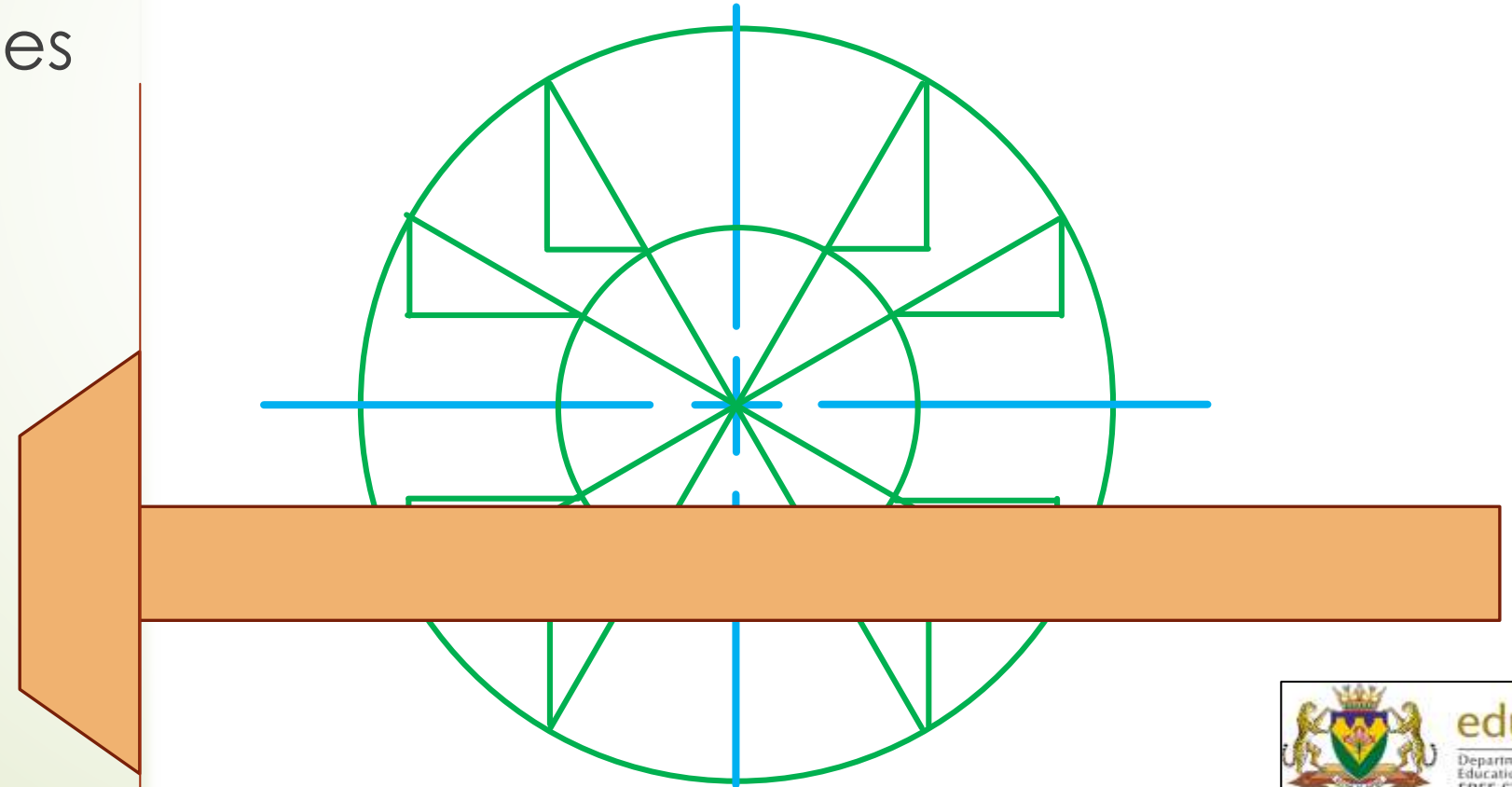
- Question: Construct an ellipse by means of the concentric circle method
- From the intersection points on the inner circle draw horizontal lines



Geometric Constructions

Step 12

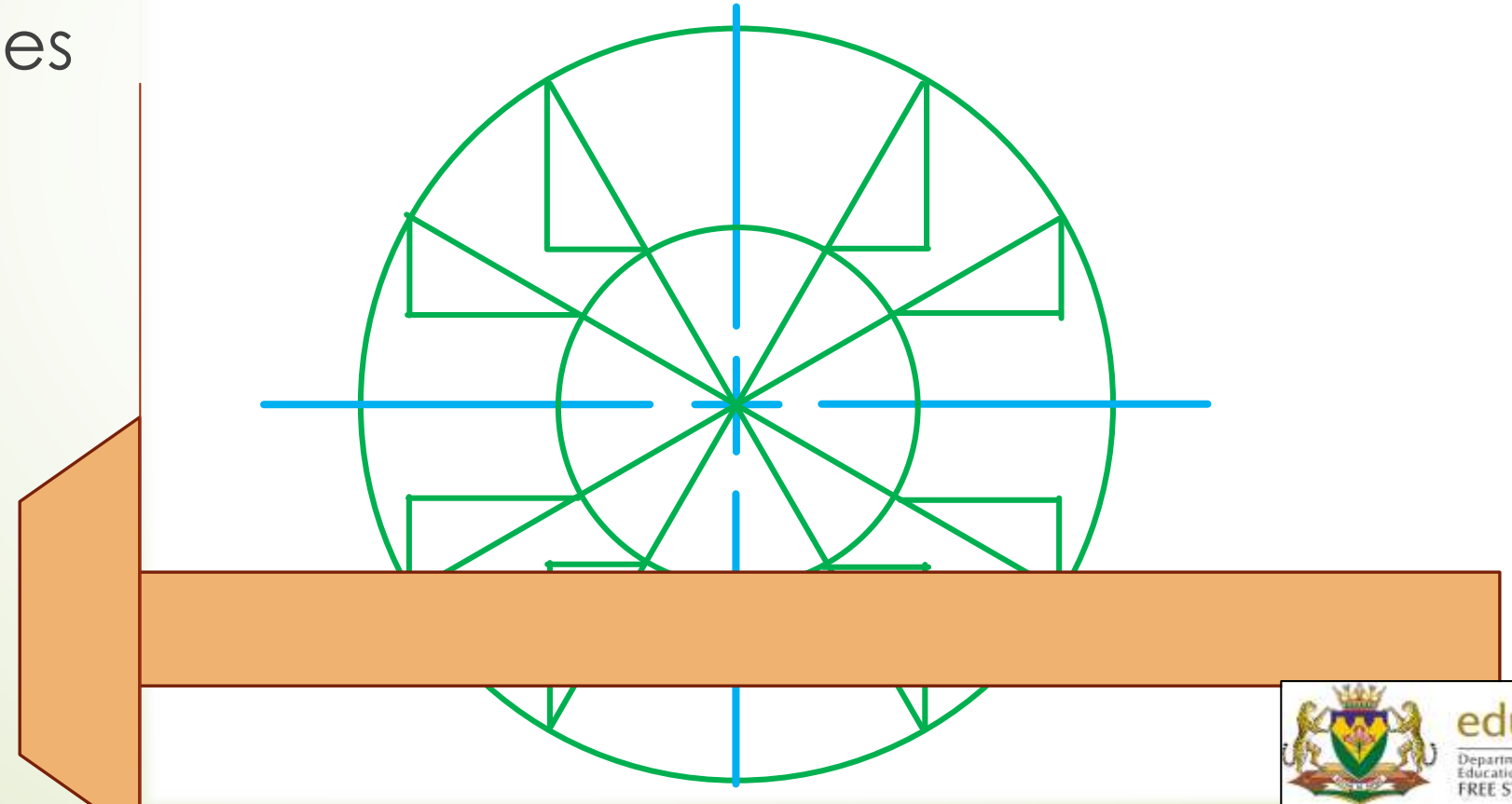
- Question: Construct an ellipse by means of the concentric circle method
- From the intersection points on the inner circle draw horizontal lines



Geometric Constructions

Step 13

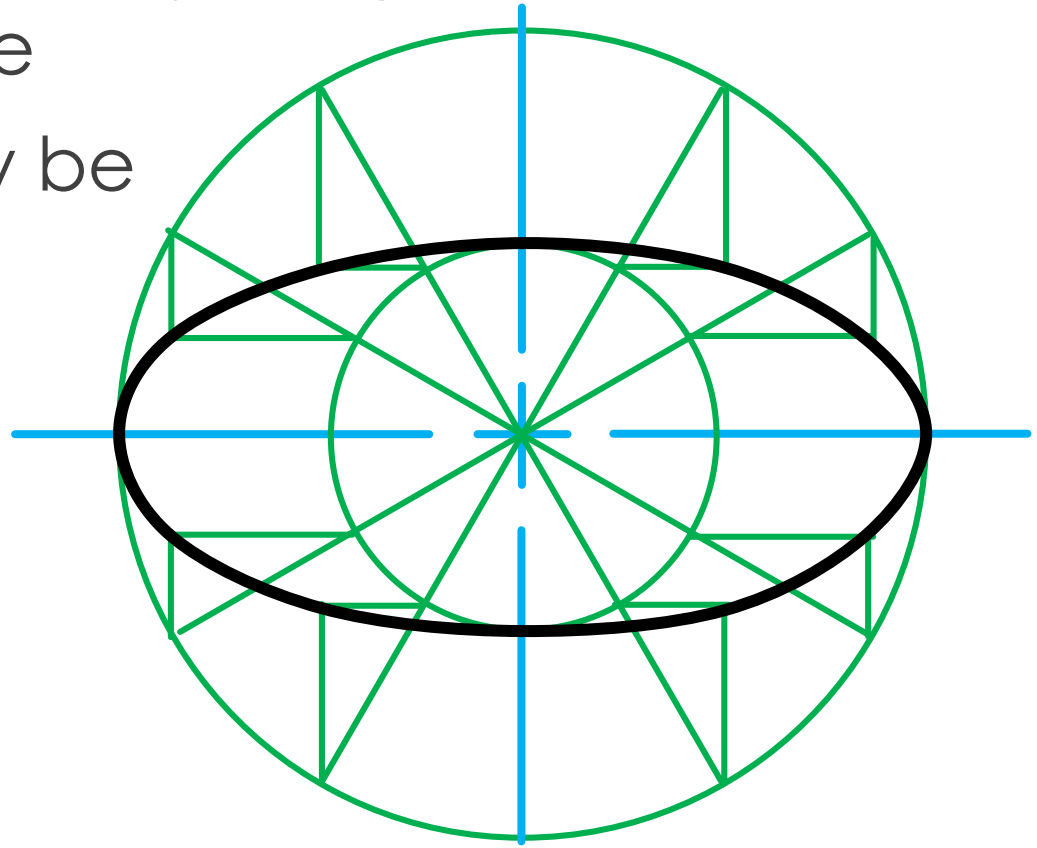
- Question: Construct an ellipse by means of the concentric circle method
- From the intersection points on the inner circle draw horizontal lines



Geometric Constructions

Step 14

- Question: Construct an ellipse by means of the concentric circle method
- Complete the ellipse by joining all the intersection points by means of a curve
- Elliptical curves may be drawn in freehand



Geometric Constructions

Task 1.9.1

- Set up an A3 drawing sheet with a border and a title block.
- Draw a circle (A) with a radius of 100 mm and a circle (B) with a radius of 60 mm.
- Question: **Construct an ellipse by means of the concentric circle method.**
- Show all construction lines.
- Name this task 1.9.1