Choose and construct bisectors

Stage 03 | Perform | 8 mixed items

Stage 03: Construct a basic bisector

Perform

Show your working or construction on paper. State units where asked. For questions 7 and 8, explain your method. Numerical entries may be rounded to 2 decimal places.

Name: _____ Date: _____

Work on separate paper. Plot and label figures; retain compass arcs. Give a reason for items 7 and 8.

1. Draw equal-radius arcs from the endpoints of a 7 cm segment with radius 4 cm. Join both intersections. Name the constructed line and reproduce it on paper.

2. Draw equal-radius arcs from the endpoints of a 8 cm segment with radius 5 cm. Join both intersections. Name the constructed line and reproduce it on paper.

3. Draw equal-radius arcs from the endpoints of a 10 cm segment with radius 6 cm. Join both intersections. Name the constructed line and reproduce it on paper.

4. Draw equal-radius arcs from the endpoints of a 4 cm segment with radius 3 cm. Join both intersections. Name the constructed line and reproduce it on paper.

5. A segment is 5 cm long. Choose a radius from 2.5 cm, 3 cm and 0.5 cm so equal-radius endpoint arcs intersect in TWO points.

6. A segment is 6 cm long. Choose a radius from 3 cm, 4 cm and 0.5 cm so equal-radius endpoint arcs intersect in TWO points.

7. Diagnose an error. Draw equal-radius arcs from the endpoints of a 7 cm segment with radius 4 cm. Join both intersections. Name the constructed line and reproduce it on paper. A learner answers “Angle bisector”. Give the correct answer and identify why the proposed answer fails.

8. Explain your choice. Draw equal-radius arcs from the endpoints of a 8 cm segment with radius 5 cm. Join both intersections. Name the constructed line and reproduce it on paper.

Self-check after attempting: use the separate answer key on the skill page. Correct reasoning and a valid drawing matter as well as the final answer.

Mr. Devonish