Choose and construct bisectors

Stage 04 | Select & Adapt | 8 mixed items

Stage 04: Choose the correct locus

Select & Adapt

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. A point must be equally distant from two fixed points. Which locus is needed?

2. A point must be equally distant from two intersecting straight boundary lines. Which locus is needed?

3. A point must be equally distant from two fixed points. Which locus is needed?

4. A point must be equally distant from two intersecting straight boundary lines. Which locus is needed?

5. Draw equal-radius arcs from the endpoints of a 6 cm segment with radius 4 cm. Join both intersections. Name the constructed line and reproduce it on paper.

6. 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.

7. Diagnose an error. A point must be equally distant from two fixed points. Which locus is needed? A learner answers “Angle bisectors”. Give the correct answer and identify why the proposed answer fails.

8. Explain your choice. A point must be equally distant from two intersecting straight boundary lines. Which locus is needed?

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