Choose and construct bisectors

Stage 02 | Interpret | 8 mixed items

Stage 02: Interpret compass arcs

Interpret

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 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.

2. A segment is 7 cm long. Choose a radius from 3.5 cm, 4 cm and 0.5 cm so equal-radius endpoint arcs intersect in TWO points.

3. A segment is 8 cm long. Choose a radius from 4 cm, 5 cm and 0.5 cm so equal-radius endpoint arcs intersect in TWO points.

4. A segment is 10 cm long. Choose a radius from 5 cm, 6 cm and 0.5 cm so equal-radius endpoint arcs intersect in TWO points.

5. Which tool draws a circular arc of radius 2 cm centred at A?

6. Which tool draws a circular arc of radius 3 cm centred at B?

7. Diagnose an error. 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. A learner answers “3 cm”. Give the correct answer and identify why the proposed answer fails.

8. Explain your choice. A segment is 7 cm long. Choose a radius from 3.5 cm, 4 cm and 0.5 cm so equal-radius endpoint arcs intersect in TWO points.

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