MEMORANDUM

Name: ..... Class: .....

Date: .....

MARK ____ / 13

Answer all questions. Show all your working — marks are awarded for method as well as the final answer. **Teacher copy: accept any correct equivalent method.**

1 What two instruments may you use in a construction? (1)

A **compass and a ruler (straight edge)** only. ✓ (1)

2 Why must you not rub out your arcs? (1)

The arcs are the **working** — the marks are awarded for them. ✓ (1)

3 When bisecting AB, how wide must the compass be opened? (2)

More than half of AB, or the arcs will not cross. ✓✓ (2)

4 What angle does a perpendicular bisector make with the line? (1)

90° ✓ (1)

5 How do you construct a 30° angle? (2)

Construct **60°**, then **bisect** it. ✓✓ (2)

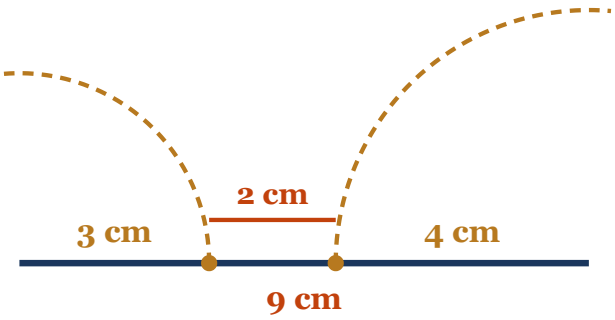
6 How do you construct a 45° angle? (2)

Construct **90°**, then **bisect** it. ✓✓ (2)

7 Which side is usually the most convenient to draw first in an SSS construction? (1)

Usually the **longest** side, because it gives a clear base — but any of the given sides can be used. ✓ (1)

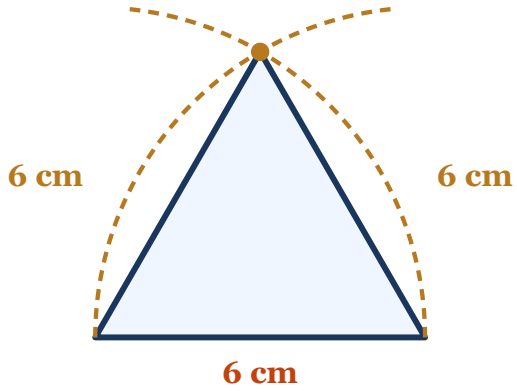
8 Can a triangle with sides 3 cm, 4 cm and 9 cm be constructed? (2)



the two arcs fall short of each other

No — 3 + 4 = 7, which is less than 9, so the arcs never meet. ✓✓ (2)

9 Each angle of a constructed equilateral triangle measures... (1)



arcs of the same radius from both ends

60° ✓ (1)

TOTAL: 13 marks

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