Instructions

• Use **black** ink or ball-point pen.
• Answer all questions.
• Answer the questions in the spaces provided – *there may be more space than you need.*
• Diagrams are **NOT** accurately drawn, unless otherwise indicated.
• You must **show all your working out.**

Information

• The marks for each question are shown in brackets – *use this as a guide as to how much time to spend on each question.*

Advice

• Read each question carefully before you start to answer it.
• Keep an eye on the time.
• Try to answer every question.
• Check your answers if you have time at the end
Prove that the angle subtended by an arc at the centre of a circle is twice the angle subtended at any point on the circumference.
Prove the angle subtended at the circumference by a semicircle is a right angle
Prove that angles in the same segment are equal
Prove that opposite angles of a cyclic quadrilateral sum to 180°
Prove the alternate segment theorem