Keywords: Autumn 2 Year 11 Maths

Athena Sixth Form College

DOWNHAM MARKET ACADEMY

Topic Title: Algebra, Quadrilaterals, and circles

- **Quadratics:** To be able to solve quadratic equations using graphs and by completing the square.
- **Circles:** To be able to solve circle theorem problems including proof.
- **Tangents:** To be able to find the equation of a tangent.

Keyword	Definition
Quadratic	Equations involving the power of 2 i.e. $ax^2+bx+c=0$
Transformations	A general term for four specific ways to manipulate the shape and/or position of a point, a line, or geometric figure. These are reflections, translations, rotations, enlargements.
Diameter	The distance from one point on a circle through the centre to another point on the circle.
Tangent	A line that touches the circles outside edge at only one point.
Chord	A straight line that joins one edge of the circle to another edge, but does not go through the centre.
Segment	The region that is bounded by an arc and a chord of the circle.
Sector	The portion of a circle that is enclosed between two radii and the edge of the circle.
Roots	A solution to an equation, usually expressed as a number or an algebraic formula.
Proof	Logical mathematical arguments used to show the truth of a mathematical statement. This is usually done using algebra.