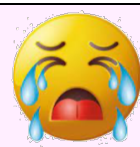
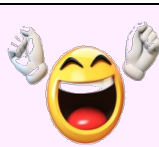


AQA Further Maths Topic Checklist

2 papers (one calculator, one non calculator)

Topics



Number				
Product Rule for Counting				
Surds				
Algebra				
Functions – domain and range, composite and inverse				
Expanding brackets and collecting like terms				
Factorising (common factor, product sum, AC method, grouping, diff of 2 squares)				
Binomial expansion				
Algebraic fractions				
Re-arranging equations to make the subject				
Factor theorem				
Completing the square				
Sketching functions – linear, quadratic, exponential and piecewise				
Solving linear equations				
Solving quadratic equations				
Simultaneous equations (linear and quadratic) - 2 unknowns				
Simultaneous equations (linear) - 3 unknowns				
Solving inequalities - linear				
Solving inequalities - quadratic				
Indices				
Proofs - algebraic				
Sequences – nth term and limiting value				
nth term of linear sequences				
nth term of quadratic sequences				
Coordinate Geometry				
Gradients				
Distance between two points (using Pythagoras)				
Use ratio to find the coordinates of a point on a line given the coordinates of two other points				
Equation of a straight line (drawing and finding)				
Circles				
Equation of a tangent to a circle				
Calculus				
Basic differentiation of kx^n where n is any integer				
Equations of tangents and normals				
Increasing/decreasing functions				
Second derivative				
Stationary points				
Classifying maximum and minimum				
Sketching a curve based on max and min points				
Matrix Transformations (2x2 or 2x1 matrices)				
Multiplying matrices				
Identity matrix				
Transformation matrices				
Geometry				
Surface area and volume of prisms, cylinders, sphere, cones and pyramids (assumed)				
Sine and cosine rule				
Area of any triangle				
Pythagoras in 2D and 3D				
Trig graphs				
Trig identities				
Trig - special angles				
Solving trig equations				