
GCSE: Edexcel Mathematics
TOPICS FOR AUTOGRAPH [Sept 2021]

References to Pearson-Edexcel GCSE Mathematics

Foundation Tier

Red items not yet implemented in Web-Autograph

1. NUMBER

N Use of the number line

2. ALGEBRA

A8 Coordinates and graphs
A9 y = mx + c; parallel lines
A10 Gradient and intercept
A11 Roots and intercepts; turning points
A12 Linear, quadratic, cubic, reciprocal
A14 plotting graphs, including reciprocal
A17 Solving an equation by graphing
A18 Solve quadratic by factorising and graphing
A19 Two simultaneous equations
A22 Linear inequalities

3. RATIO and PROPORTION

R10 Direct and inverse graphs
R16 Growth and decay

4. GEOMETRY and MEASURES

G1 Vertices; regular polygons
G2 Perpendicular from point to line
G3 Angle properties
G4 Quadrilaterals
G6 Pythagoras; isosceles triangles
G7 Rotate, reflect, translate, enlarge
G9 Circle properties
G12 Cube, cuboid, prism, cylinder
Pyramid, cone, sphere
G13 3D shapes
G16 Area and volume
G18 Circle: arc length, sector area
G25 Vectors: add, subtract, multiply

5. PROBABLITY

P8 2-dice simulation

6. STATISTICS

S2 Frequency tables; charts;
Line graphs for time series
S4 Continuous and discrete; median, mean, mode and modal class, and spread
S6 Scatter diagram; line of best fit

Higher Tier

2. ALGEBRA

A7 Inverse function; composite function
A8 Coordinates and graphs
A9 y = mx + c; parallel and perpendicular
A10 Gradient and intercept
A11 Roots and intercepts; turning points
Completing the square
A12 Linear, quadratic, cubic, reciprocal
A13 Translation and reflection of function
A14 Plotting graphs, including exponential
A15 Gradient of graphs; area under graphs
Distance-time; velocity-time
A16 Equation of circle; equation of tangent
A17 Solving an equation by graphing
A18 Solving quadratic by formula
A19 Linear/linear; linear/quadratic
A20 Solving by iteration
A22 Graphing inequalities: linear, quadratic

3. RATIO and PROPORTION

R10 Direct and inverse graphs
R15 Gradient at a point on a curve
R16 Growth and decay

4. GEOMETRY and MEASURES

G1 Vertices; regular polygons
G2 Constructions and loci
G3 Angle properties
G4 Quadrilaterals
G6 Pythagoras; Isosceles triangles
G7 Rotate, reflect, translate, enlarge
Negative enlargement factor
G8 Combinations of transformations invariance
G9 Circle: tangent, arc, sector and segment
G10 Standard circle theorems
G12 Cube, cuboid, prism, cylinder
Pyramid, cone, sphere
G17 Formulae: circle, sphere, pyramid, cone
G18 Circle: arc length, sector area
G25 Vectors: add, subtract, multiply; translate

6. STATISTICS

S1 Population and sampling
S2 Frequency tables; charts;
Line graphs for time series
S3 Grouped discrete/continuous data
Histogram with unequal classes
S4 Median, mean, mode and spread
Box plot; outliers
S6 Scatter diagram; line of best fit
