

Paper 1 and Paper 2 Higher predictions

There was very little algebra in paper 1 – so we are expecting a good amount on papers 2 and 3. Revise these topics and work through the algebra pack (use the mark schemes to check your answers)

1. Algebra!

- a. Solving equations
- b. Quadratics
- c. Expanding
- d. Factorising
- e. Algebraic fractions
- f. Simultaneous Equations
- g. Composite and Inverse functions
- h. Rearranging Formulae
- i. Algebraic proof
- j. Iterations
- k. Real life graphs

2. Statistics and probability

- a. Combinations
- b. Tree diagrams
- c. Pie charts
- d. Venn diagrams including notation
- e. Averages (including from a table)
- f. Correlation, scatter diagram, line of best fit
- g. Histograms
- h. Stratified Sampling
- i. Frequency polygon
- j. Data collection methods

Other likely topics:

3. The behaviour of $y=a/b$ as one variable changes (mostly b) - also seen in similarity changes with volume or area
4. **Angles (VERY LIKELY!)**
 - a. of regular polygons
 - b. parallel lines
 - c. circle Theorems
5. Recurring decimals
6. Sine/cosine graphs
7. Velocity/time graphs
8. Plotting a quadratic
9. Plotting a linear graph
10. Knowing whether a coordinate lies on a given function
11. Direct and Inverse proportional questions
12. Best buy from multiple shops
13. Sine and cosine rule
14. Area of a triangle using $\frac{1}{2}ab\sin C$
15. Lots of questions where students need to identify the errors
16. Prime factors
17. Error intervals
18. Trigonometry
19. Pythagoras
20. Compound interest
21. Reverse percentages
22. Vectors
23. Area of a trapezium
24. Quadratic n th term
25. Coordinate geometry with $y=mx+c$
26. Construction and loci (Separate booklet)

Websites which are also good for revision:

- <http://mathsbot.com/>
- maths workout (langdon rotate41)
- maths genie