## A Level Further Mathematics Report Statements

Further resources available via Integral maths

| Statement | Links |
| :--- | :--- |
| Be able to use the two stage Simplex algorithm | video link |
| Be able to use the Big-M method | video link |
| Be able to complete all the early and late event times when analysing <br> critical paths | video link |
| Be able to complete Gantt charts that identify floats and critical activities | video link |
| Be able to complete critical path analysis resource histograms and <br> comment on efficiency | video link |
| Complete critical path analysis scheduling diagrams | video link |
| Be able to use Dijkstra's algorithm to find the shortest path | video link |
| Be able to use the route inspection algorithm | video link |
| Develop your understanding of the travelling salesman algorithm | video link |
| Be able to use all the Decision maths sorting algorithms | video link |
| Be able to represent loci in Argand diagrams | video link |
| Be able to calculate volumes of revolution around both the $\times$ and y axes |  |
| To be able to find sums of series using standard results | video link |
| To be able to find the determinant of a $3 \times 3$ matrix without using a <br> calculator | video link |
| To be able to determine whether a system of three linear equations in <br> three unknowns is consistent or inconsistent | video link |
| Develop your understanding of the different types of proof by induction | video link |
| Be able to convert the vector form of a line into Cartesian form | video link |
| Understand how to use the scalar product to find an angle between two <br> three dimensional vectors | video link |
| Determine whether two three dimensional vectors intersect and if so, <br> locate this point |  |

