## Paper 3H - grouped by content area

Number (*see Ratio - some overlap of topic areas)

| Arithmetic | Negative number |
| :---: | :---: |
| Properties | Laws of indices |
| Approximation and estimation | Bounds |
| Other | Product rule for counting |
| Algebra |  |
| Manipulation | Simplification |
|  | Expansion of bracket |
|  | Substitute values |
|  | Difference of two squares |
|  | Expansion of brackets |
|  | Change subject of a formula |
|  | Forming an expression |
|  | Algebraic fractions |
| Equations and inequalities | Set up and solve equation |
|  | Simultaneous equations linear/quadratic |
| Graphs | Gradient of a straight line graph |
| Ratio, proportion and rates of change (*see Number - some overlap of topic areas) |  |
| Conversions | Time |
| Percentages | Percentage decrease |
|  | Depreciation |
|  | Reverse percentage |


| Ratio |  |
| :--- | :--- |
|  | Write as a ratio |
| Proportion | Share in a ratio |
| Compound Measures | Direct proportion |
| Growth and decay | Average speed |
| Geometry and measures | General iterative processes |
| Angles | Circle theorems |
| Length, area and volume | Area of a trapezium |
| Pythagoras's Theorem and Trigonometry | Pythagoras's Theorem |
| Probability | Trigonometry |
| Statistics | Trigonometry in 3-D |
| Probability | Column vectors |
| Vectors | Frequency polygon |
|  | Histogram |

