## Number

|  | Topics | Clip Number | R | A | G |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Arithmetic | Fraction arithmetic | 65-70, 72 |  |  |  |
|  | Decimal arithmetic | 47-51, 135, 136 |  |  |  |
| Whole number theory | Types of numbers | 25, 99, 100, 101, 111 |  |  |  |
|  | Factors and multiples | 27, 31-36 |  |  |  |
| Fractions | Decimals and fractions | 52, 73 |  |  |  |
|  | Recurring decimals | 53, 54 |  |  |  |
| Percentages | Percentage calculations | 84, 85, 86 |  |  |  |
|  | Percentage change | 88, 97, 98 |  |  |  |
| Powers and roots | Index notation | 102 |  |  |  |
|  | Powers of integers | 99-103 |  |  |  |
|  | Laws of indices | 104-110 |  |  |  |
|  | Surds and exact calculations | 113-119 |  |  |  |
| Approximation and estimation | Rounding | 17, 56, 130, 133 |  |  |  |
|  | Estimation | 131, 132 |  |  |  |
| Standard form | Standard form representation | 122, 123, 124 |  |  |  |
|  | Standard form calculation | 125-127 |  |  |  |

## Ratio, proportion, and rates of change

|  | Topics | Clip Number | R | A | $\mathbf{G}$ |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Ratios | Simplify ratios | 329,331 |  |  |  |
|  | Use ratio | $332-338$ |  |  |  |
| Direct and inverse <br> proportion | Inverse proportion | $342,346-348$ |  |  |  |

## Algebra

|  | Topics | Clip Number | R | A | G |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Algebraic expressions | Simplifying algebraic expressions | $156-159,173-175$ |  |  |  |
|  | Formulate algebraic expressions | $151-153$ |  |  |  |
|  | Multiplying out brackets | $160-166$ |  |  |  |
|  | Rearranging formulae | $280-287$ |  |  |  |
|  | Substitute values into expressions | $780-787$ |  |  |  |
|  | Use of brackets | $160-166$ |  |  |  |
| Algebraic formulae | Use kinematics formulae | 788,789 |  |  |  |
| Algebraic equations | Quadratic equations | $230-234,238,239$, <br> $241,242,244,245$ |  |  |  |
|  | Approximate solutions by |  |  |  |  |
| iteration | 322 |  |  |  |  |

## Algebra (continued)

|  | Topics | Clip Number | R | A | G |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Graphs of equations and functions | Equations of circles | 778, 779 |  |  |  |
|  | Drawing and interpreting graphs | $\begin{gathered} 205-217,251-257, \\ 298-306,800,801, \\ 894-897 \end{gathered}$ |  |  |  |
|  | Distance/speed - time graphs | 874-886 |  |  |  |
| Straight line graphs | Parallel and perpendicular lines | 214, 215, 216 |  |  |  |
|  | Equation of a line | 205-213 |  |  |  |

## Geometry and measures

|  | Topics | Clip Number | R | A | G |
| :--- | :--- | :---: | :--- | :--- | :--- |
| Units and measurement | Units of speed, distance and time | $692,693,694,709$, <br> $710,711,716-724$ |  |  |  |
| Plane isometric <br> transformations | Transformations | $637-657$ |  |  |  |
|  | Construct loci | $674-679$ |  |  |  |
|  | Maps, bearings and scale <br> drawings | $492-496,864-871$ |  |  |  |
| Circle geometry | Circumference of a circle and <br> length of an arc | $534-538,544,545$ |  |  |  |
| Area calculations | Area of a rectangle | 554 |  |  |  |
| Triangle mensuration | Trigonometry | $848-853$ |  |  |  |
|  | Exact trigonometric ratios | $845-847$ |  |  |  |

## Probability

|  | Topics | Clip Number | R | A | G |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Basic probability and <br> experiments | Relative frequency | 356,357 |  |  |  |
|  | Equally likely outcomes and <br> probability | $351-355$ |  |  |  |
| Combined events and <br> probability diagrams | Venn diagrams and sets | $370-380,383-388$ |  |  |  |
|  | Conditional probability | $364-367,389,390$ |  |  |  |

## Statistics

|  | Topics | Clip Number | R | A | G |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Analysing Data | Graphical misrepresentation | $425,453,454$ |  |  |  |
| Interpreting and <br> representing data | Pie chart | $427,428,429$ |  |  |  |
|  | Line graph and time series | $450,451,452$ |  |  |  |

